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Attorney's Docket No.: 0119378-00262 / 1081

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Lin Zhi et al.

Patent No. : 7,026,484

Issue Date : April 11, 2006

Serial No. : 10/080,926

Filed : February 22, 2002

Title : **TRICYCLIC ANDROGEN RECEPTOR MODULATOR COMPOUNDS  
AND METHODS**

Art Unit : 1625

Examiner : D. Margaret Seaman

Conf. No. : 7786

Cust. No. : 20985

Attn.: Certificate of Corrections Branch

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Certificate

MAY 06 2009

of Correction

TRANSMITTAL LETTER

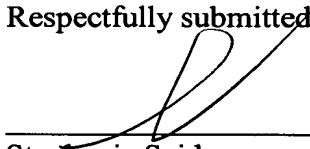
Dear Sir:

Transmitted herewith are a Request for a Corrected Certificate of Correction (5 pages), new Certificate of Correction (8 pages), Hand-Annotated Sheets (3 pages), originally filed Certificate of Correction (28 pages), copy of Preliminary Amendment (31 pages), Index of Claims (1 page) and a return postcard for filing in connection with the above-identified application. All errors sought to be corrected were made in printing by the Patent and Trademark Office, and no fee is believed to be due. However, should it be determined that a fee for filing these papers is required, the Commissioner is authorized to charge Deposit Account No. 02-1818, as stated below:



The Commissioner is hereby authorized to charge any fees that may be due in connection with this paper or with this application during its entire pendency to Deposit Account No. 02-1818. A duplicate of this sheet is enclosed.

Respectfully submitted,

  
Stephanie Seidman  
Reg. No. 33,779

Attorney Docket No. 0119378-00262 / 1081

Address all correspondence to: 77202

Stephanie Seidman

K&L Gates LLP

3580 Carmel Mountain Road, Suite 200

San Diego, California 92130

Telephone: (858) 509-7410

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Date of Deposit May 1, 2009

I hereby certify that this paper is being deposited with the United States Postal "Express Mail Post Office to Addressee" Service under 37 CFR §1.10 on the date indicated above and is addressed to: Commissioner for Patents, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA, 22313-1450.

  
Christopher M. Ochs



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant : Lin Zhi et al.  
Patent No. : 7,026,484  
Issue Date : April 11, 2006  
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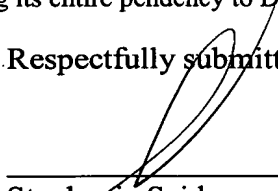
**TRANSMITTAL LETTER**

Dear Sir:

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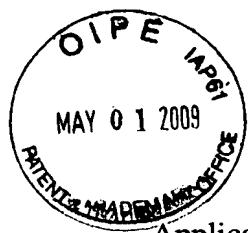
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Stephanie Seidman  
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Attorney Docket No. 0119378-00262 / 1081  
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Christopher M. Ochs



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant :	Lin Zhi et al.	Art Unit :	1625
Patent No. :	7,026,484	Examiner :	D. Margaret Seaman
Issue Date :	April 11, 2006	Conf. No. :	7786
Serial No. :	10/080,926	Cust. No. :	77202
Filed :	February 22, 2002		
Title :	TRICYCLIC ANDROGEN RECEPTOR MODULATOR COMPOUNDS AND METHODS		

**Attn.: Certificate of Corrections Branch**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

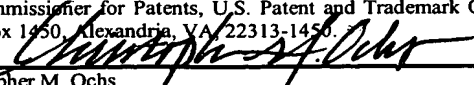
**REQUEST FOR CORRECTION TO ISSUED CERTIFICATE OF CORRECTION**

Dear Sir:

Issuance of a corrected Certificate of Correction for the above-referenced patent respectfully is requested. New errors were introduced by the PTO in the Certificate of Correction issued on 6 January 2009. A hand-corrected version of the issued Certificate of Correction for the above captioned patent is attached. Correction of the following errors introduced by the PTO respectfully is requested:

In issued Claim 34, on page 6 of the Certificate of Correction issued on 6 January 2009, in line 32 the PTO incorrectly omitted "hydrogen, " between "among" and "F". Please insert "-hydrogen, -" so that the claim now recites —among hydrogen, F—, as originally recited in the issued patent. The PTO incorrectly omitted a comma ",", between the capital letter "I" and capital letters "CN". Please insert a comma ",", such that the recitation is now "-I, CN—" as originally recited in the issued patent.

In the Certificate of Correction issued on 6 January 2009, the PTO incorrectly omitted issued Claim 53, by omitting pages 14-15 of the Certificate of Correction issued on 27 February 2007. The omission by the PTO results in the omission of formulas (I) through (IV) and substituents R<sup>1</sup> through R<sup>16</sup> of issued Claim 53. Accordingly, please insert omitted Claim 53, including the formulae and substituents, which were originally provided on pages 14-15 in the Certificate of Correction issued on 27 February 2007, so that the formulae and

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Christopher M. Ochs

Applicant : Lin Zhi *et al.*  
Serial No. : 10/080,926  
Filed : February 22, 2002

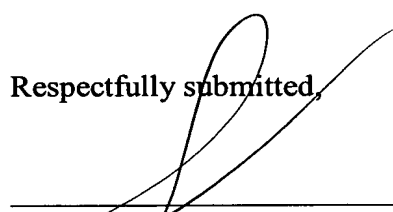
Attorney's Docket No.: 119378-00262 / 1081  
**Request for Correction to Issued Certificate of Correction**

substituents of issued Claim 53 are properly presented. This was previously specified in the Request for Certificate of Correction, filed 9 October 2008 and entered into the file history. Issued Claim 53 corresponds to the originally filed Claim 98 as evidenced by the Index of Claims prepared by the PTO, dated 27 October 2005. A copy of the Index of Claims is attached for your reference. Claim 53 as issued was amended in the response, mailed 15 September 2005. Amended Claim 98 issued as Claim 53. A copy of the amendment and response with amended Claim 98 is attached.

A clean copy of Patentee's originally filed Request for Certificate of Correction, filed 9 August 2006, is attached. This Certificate of Corrections correctly presents the substituents and variables associated with Claims 34 and 53. Also attached is a new Certificate of Correction, which correctly presents the substituents and variables associated with Claims 34 and 53.

The errors sought to be corrected were made in printing by the Patent and Trademark Office, and no fee should be due. If it is determined that a fee for filing these papers is required, the Commissioner is authorized to charge Deposit Account No. 02-1818.

Respectfully submitted,



---

Stephanie Seidman  
Reg. No. 33,779

Attorney Docket No. 119378-00262 / 1081  
**Address all correspondence to:** 77202  
Stephanie Seidman  
K&L Gates LLP  
3580 Carmel Mountain Road, Suite 200  
San Diego, California 92130  
Telephone: (858) 509-7410  
Facsimile: (858) 509-7460  
email: stephanie.seidman@klgates.com

Applicant : Lin Zhi *et al.*  
Serial No. : 10/080,926  
Filed : February 22, 2002

Attorney's Docket No.: 119378-00262 / 1081  
**Request for Correction to Issued Certificate of Correction**



**NEW CERTIFICATE OF CORRECTION  
PROVIDING CLAIMS 34 AND 53**

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# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

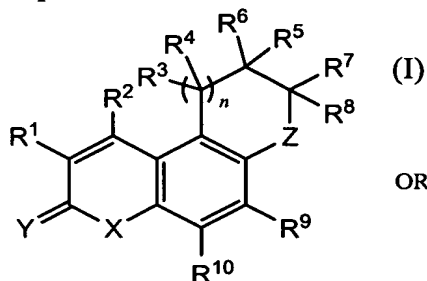
Page 1 of 8

PATENT NO. : 7,026,484 B2  
 APPLICATION NO : 11/080,926  
 DATED : APRIL 11, 2006  
 INVENTOR(S) : LIN ZHI ET AL.

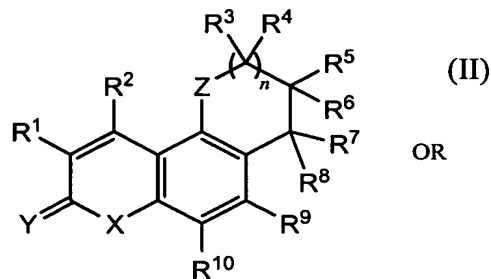
It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

## IN THE CLAIMS:

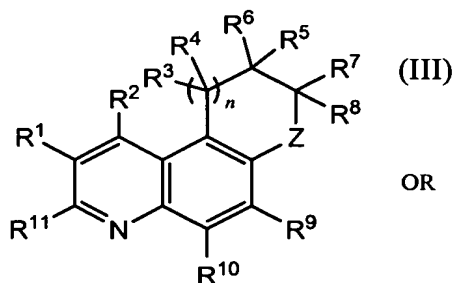
34. A pharmaceutical composition, comprising:  
 a pharmaceutically acceptable carrier; and  
 a compound of formula:



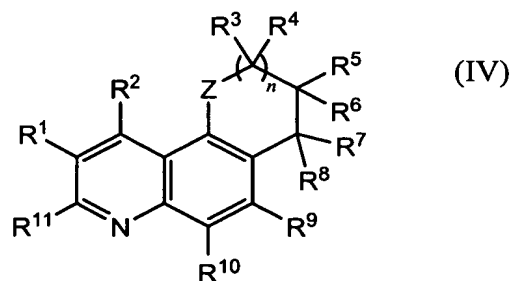
OR



OR



OR



## MAILING ADDRESS OF SENDER:

Stephanie Seidman  
 K&L Gates LLP  
 3580 Carmel Mountain Road, Suite 200  
 San Diego, CA, 92130

Staple  
Here  
Only

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 2 of 8

PATENT NO. : 7,026,484 B2  
APPLICATION NO : 11/080,926  
DATED : APRIL 11, 2006  
INVENTOR(S) : LIN ZHI ET AL.

It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

wherein:

$R^1$  is selected from among hydrogen, F, Cl, Br, I,  $NO_2$ ,  $OR^{12}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $NR^{12}R^{13}$ ,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl and  $C_1$ - $C_8$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^2$  is selected from among F, Cl, Br, I,  $CF_3$ ,  $CHF_2$ ,  $CH_2F$ ,  $CF_2Cl$ , CN,  $CF_2OR^{12}$ ,  $CH_2OR^{12}$ ,  $OR^{12}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $NR^{12}R^{13}$ , substituted  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl,  $C_2$ - $C_8$  alkenyl and  $C_2$ - $C_8$  alkynyl, wherein the haloalkyl, heteroalkyl, alkenyl and alkynyl groups are optionally substituted;

$R^3$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^4$  is selected from among hydrogen, F, Cl, Br, I,  $OR^{12}$ ,  $NR^{12}R^{13}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl,  $C_2$ - $C_8$  alkynyl,  $C_2$ - $C_8$  alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;

$R^5$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^6$  is selected from among hydrogen, F, Cl, Br, I,  $OR^{12}$ ,  $NR^{12}R^{13}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl,  $C_2$ - $C_8$  alkynyl,  $C_2$ - $C_8$  alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;

## MAILING ADDRESS OF SENDER:

Stephanie Seidman  
K&L Gates LLP  
3580 Carmel Mountain Road, Suite 200  
San Diego, CA, 92130

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# UNITED STATES PATENT AND TRADEMARK OFFICE

## CERTIFICATE OF CORRECTION

Page 3 of 8

PATENT NO. : 7,026,484 B2  
 APPLICATION NO : 11/080,926  
 DATED : APRIL 11, 2006  
 INVENTOR(S) : LIN ZHI ET AL.

It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

$R^7$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^8$  is selected from among hydrogen, F, Cl, Br, I,  $OR^{12}$ ,  $NR^{12}R^{13}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl,  $C_2$ - $C_8$  alkynyl,  $C_2$ - $C_8$  alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted; or

$R^3$  and  $R^5$  taken together form a bond; or

$R^5$  and  $R^7$  taken together form a bond; or

$R^4$  and  $R^6$  taken together form a three- to eight-membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted; or

$R^6$  and  $R^8$  taken together form a three- to eight-membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted;

$R^9$  and  $R^{10}$  each independently is selected from among hydrogen, F, Cl, Br, I, CN,  $OR^{12}$ ,  $NR^{12}R^{13}$ ,  $C_m(R^{12})_{2m}OR^{13}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $NR^{12}C(O)R^{13}$ ,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl and arylalkyl groups are optionally substituted;

$R^{11}$  is selected from among hydrogen, F, Br, Cl, I, CN,  $OR^{14}$ ,  $NR^{14}R^{13}$  and  $SR^{14}$ ;

$R^{12}$  and  $R^{13}$  each independently is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl,  $C_2$ - $C_8$  alkenyl,  $C_2$ - $C_8$  alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted;

## MAILING ADDRESS OF SENDER:

Stephanie Seidman  
 K&L Gates LLP  
 3580 Carmel Mountain Road, Suite 200  
 San Diego, CA, 92130



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# UNITED STATES PATENT AND TRADEMARK OFFICE

## CERTIFICATE OF CORRECTION

Page 4 of 8

PATENT NO.           .: 7,026,484 B2  
 APPLICATION NO   .: 11/080,926  
 DATED               .: APRIL 11, 2006  
 INVENTOR(S)       .: LIN ZHI ET AL.

It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

$R^{14}$  is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl, aryl, heteroaryl,  $C(O)R^{15}$ ,  $CO_2R^{15}$  and  $C(O)NR^{15}R^{16}$ , wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups are optionally substituted;

$R^{15}$  and  $R^{16}$  each independently is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

W is O or S;

X is  $N\{R^{14}\}$ ;

Y is selected from among O, S,  $N\{R^{12}\}$  and  $N\{OR^{12}\}$ ;

Z is  $N\{R^{12}\}$ ;

n is 0; and

m is 0 or 1;

or a pharmaceutically acceptable salt thereof.

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 K&L Gates LLP  
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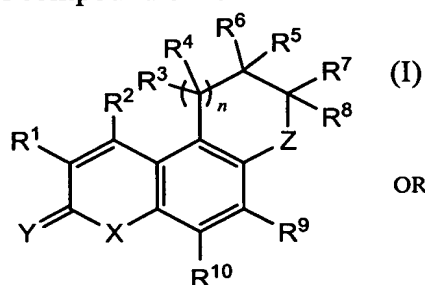
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Page 5 of 8

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 APPLICATION NO : 11/080,926  
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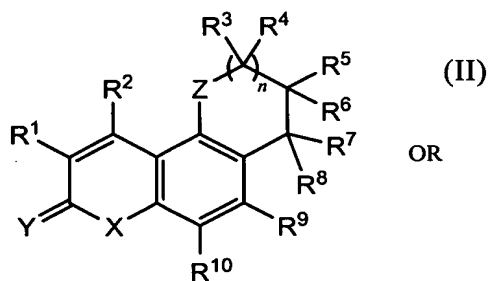
It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

53. A compound of formula:



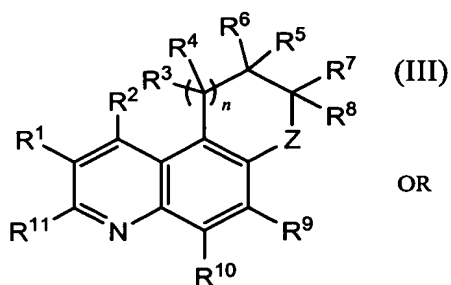
(I)

OR



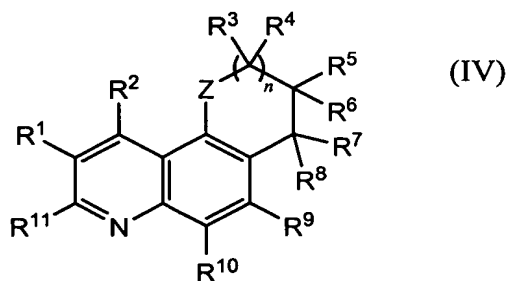
(II)

OR



(III)

OR



(IV)

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 K&L Gates LLP  
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Page 6 of 8

PATENT NO. : 7,026,484 B2  
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wherein:

$R^1$  is selected from among hydrogen, F, Cl, Br, I,  $NO_2$ ,  $OR^{12}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $NR^{12}R^{12}$ ,  $C_1-C_8$  alkyl,  $C_1-C_8$  haloalkyl and  $C_1-C_8$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^2$  is selected from among F, Cl, Br,  $CF_3$ ,  $CHF_2$ ,  $CH_2F$ ,  $CF_2Cl$ ,  $CF_2OR^{12}$ ,  $CH_2OR^{12}$ ,  $OR^{12}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $NR^{12}R^{13}$ , substituted  $C_1-C_6$  alkyl,  $C_1-C_6$  haloalkyl, and  $C_1-C_6$  heteroalkyl, wherein the haloalkyl, and heteroalkyl groups are optionally substituted;

$R^3$  is selected from among hydrogen,  $C_1-C_6$  alkyl,  $C_1-C_6$  haloalkyl and  $C_1-C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^4$  is selected from among hydrogen,  $C_1-C_6$  alkyl,  $C_1-C_6$  haloalkyl and  $C_1-C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^5$  is selected from among hydrogen,  $C_1-C_6$  alkyl,  $C_1-C_6$  haloalkyl and  $C_1-C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^6$  is selected from among hydrogen,  $C_1-C_6$  alkyl,  $C_1-C_6$  haloalkyl,  $C_1-C_6$  heteroalkyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, heteroaryl and aryl groups are optionally substituted;

$R^7$  is selected from among hydrogen,  $C_1-C_6$  alkyl,  $C_1-C_6$  haloalkyl and  $C_1-C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

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 K&L Gates LLP  
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Page 7 of 8

PATENT NO. : 7,026,484 B2  
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 DATED : APRIL 11, 2006  
 INVENTOR(S) : LIN ZHI ET AL.

It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

$R^8$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl,  $C_1$ - $C_6$  heteroalkyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, heteroaryl and aryl groups are optionally substituted; or  
 $R^3$  and  $R^5$  taken together form a bond; or  
 $R^5$  and  $R^7$  taken together form a bond; or  
 $R^4$  and  $R^6$  taken together form a three- to eight-membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted; or  
 $R^6$  and  $R^8$  taken together form a three- to eight-membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted;  
 $R^9$  and  $R^{10}$  each independently is selected from among hydrogen, F, Cl, Br, I, CN,  $OR^{12}$ ,  $NR^{12}R^{13}$ ,  $C_m(R^{12})_{2m}OR^{13}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $NR^{12}C(O)R^{13}$ ,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl and arylalkyl groups are optionally substituted;  
 $R^{11}$  is selected from among F, Br, Cl, I, CN,  $OR^{14}$ ,  $NR^{14}R^{13}$  and  $SR^{14}$ ;  
 $R^{12}$  and  $R^{13}$  each independently is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl,  $C_2$ - $C_8$  alkenyl,  $C_2$ - $C_8$  alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted;  
 $R^{14}$  is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl, aryl, heteroaryl,  $C(O)R^{15}$ ,  $CO_2R^{15}$  and  $C(O)NR^{15}R^{16}$ , wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups are optionally substituted;

## MAILING ADDRESS OF SENDER:

Stephanie Seidman  
 K&L Gates LLP  
 3580 Carmel Mountain Road, Suite 200  
 San Diego, CA, 92130

Staple  
Here  
Only

# UNITED STATES PATENT AND TRADEMARK OFFICE

## CERTIFICATE OF CORRECTION

Page 8 of 8

PATENT NO.           .: 7,026,484 B2  
 APPLICATION NO   .: 11/080,926  
 DATED               .: APRIL 11, 2006  
 INVENTOR(S)       .: LIN ZHI ET AL.

It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

$R^{15}$  and  $R^{16}$  each independently is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

W is O or S;

X is  $N\{R^{14}\}$ ;

Y is selected from the group of O, S,  $N\{R^{12}\}$  and  $NO\{R^{12}\}$ ;

Z is  $N\{R^{12}\}$ ;

n is 0; and

m is 0 or 1;

or a pharmaceutically acceptable salt thereof.

## MAILING ADDRESS OF SENDER:

Stephanie Seidman  
 K&L Gates LLP  
 3580 Carmel Mountain Road, Suite 200  
 San Diego, CA, 92130

Applicant : Lin Zhi *et al.*  
Serial No. : 10/080,926  
Filed : February 22, 2002

Attorney's Docket No.: 119378-00262 / 1081  
**Request for Correction to Issued Certificate of Correction**



**HAND-ANNOTATED CORRECTIONS TO THE  
CERTIFICATE OF CORRECTION  
ISSUED ON 6 JANUARY 2009**

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

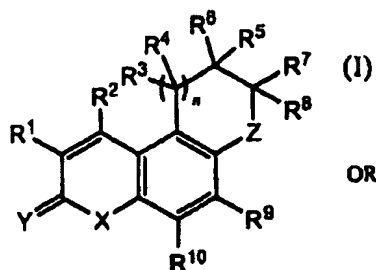
PATENT NO. : 7,026,484 B2  
 APPLICATION NO. : 10/080926  
 DATED : April 11, 2006  
 INVENTOR(S) : Lin Zhi et al.

Page 5 of 7

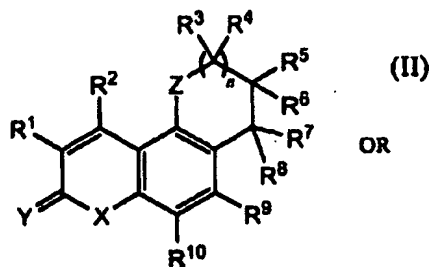
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 84, line 64 should read

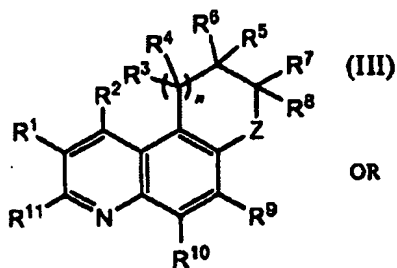
34. A pharmaceutical composition, comprising:  
 a pharmaceutically acceptable carrier; and  
 a compound of formula:



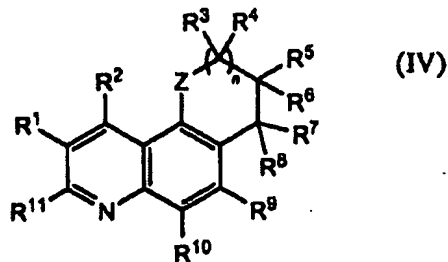
OR



OR



OR



wherein:

R<sup>1</sup> is selected from among hydrogen, F, Cl, Br, I, NO<sub>2</sub>, OR<sup>12</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl and C<sub>1</sub>-C<sub>8</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

R<sup>2</sup> is selected from among F, Cl, Br, I, CF<sub>3</sub>, CHF<sub>2</sub>, CH<sub>2</sub>F, CH<sub>2</sub>Cl, CN, CF<sub>2</sub>OR<sup>12</sup>, CH<sub>2</sub>OR<sup>12</sup>, OR<sup>12</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, substituted C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkenyl and C<sub>2</sub>-C<sub>8</sub> alkynyl, wherein the haloalkyl, heteroalkyl, alkenyl and alkynyl groups are optionally substituted;

UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION

PATENT NO. : 7,026,484 B2  
APPLICATION NO. : 10/080926  
DATED : April 11, 2006  
INVENTOR(S) : Lin Zhi et al.

Page 6 of 7

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

R<sup>3</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

R<sup>4</sup> is selected from among hydrogen, F, Cl, Br, I, OR<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkynyl, C<sub>2</sub>-C<sub>8</sub> alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;

R<sup>5</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

R<sup>6</sup> is selected from among hydrogen, F, Cl, Br, I, OR<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkynyl, C<sub>2</sub>-C<sub>8</sub> alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;

R<sup>7</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

R<sup>8</sup> is selected from among hydrogen, F, Cl, Br, I, OR<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkynyl, C<sub>2</sub>-C<sub>8</sub> alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted; or

R<sup>3</sup> and R<sup>5</sup> taken together form a bond; or

R<sup>5</sup> and R<sup>7</sup> taken together form a bond; or

R<sup>4</sup> and R<sup>6</sup> taken together form a three- to eight-membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted; or

R<sup>6</sup> and R<sup>8</sup> taken together form a three- to eight-membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted;

R<sup>9</sup> and R<sup>10</sup> each independently is selected from among hydrogen, F, Cl, Br, I, CN, OR<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, C<sub>m</sub>(R<sup>12</sup>)<sub>2m</sub>OR<sup>13</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, NR<sup>12</sup>C(O)R<sup>13</sup>, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl and arylalkyl groups are optionally substituted;

hydrogen, R<sup>11</sup> is selected from among F, Br, Cl, I, CN, OR<sup>14</sup>, NR<sup>14</sup>R<sup>13</sup> and SR<sup>14</sup>;

R<sup>12</sup> and R<sup>13</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkenyl, C<sub>2</sub>-C<sub>8</sub> alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted;



UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,026,484 B2  
APPLICATION NO. : 10/080926  
DATED : April 11, 2006  
INVENTOR(S) : Lin Zhi et al.

Page 7 of 7

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

R<sup>14</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, aryl, heteroaryl, C(O)R<sup>15</sup>, CO<sub>2</sub>R<sup>15</sup> and C(O)NR<sup>15</sup>R<sup>16</sup>, wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups are optionally substituted;

R<sup>15</sup> and R<sup>16</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl and C<sub>1</sub>-C<sub>8</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

W is O or S;

X is N {R<sup>14</sup>};

Y is selected from among O, S, N{R<sup>12</sup>} and NO{R<sup>12</sup>};

Z is N{R<sup>12</sup>};

n is 0; and

m is 0 or 1;

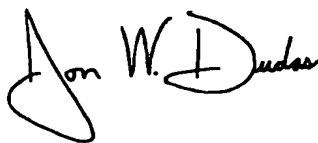
or a pharmaceutically acceptable salt thereof.

Insert Claim 53

This certificate supersedes the Certificate of Correction issued August 28, 2007.

Signed and Sealed this .

Sixth Day of January, 2009



JON W. DUDAS  
Director of the United States Patent and Trademark Office

Applicant : Lin Zhi *et al.*  
Serial No. : 10/080,926  
Filed : February 22, 2002

Attorney's Docket No.: 119378-00262 / 1081  
**Request for Correction to Issued Certificate of Correction**



**CLEAN COPY OF PATENTEE'S ORIGINALLY REQUESTED  
CERTIFICATE OF CORRECTION  
FILED ON 9 AUGUST 2006**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Lin Zhi et al.	Art Unit	: 1625
Patent No.	: 7,026,484	Examiner	: D. Margaret Seaman
Issue Date	: April 11, 2006	Conf. No.	: 7786
Serial No.	: 10/080,926	Cust. No.	: 20985
Filed	: February 22, 2002		
Title	: TRICYCLIC ANDROGEN RECEPTOR MODULATOR COMPOUNDS AND METHODS		

**Attn: Certificate of Corrections Branch**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REQUEST FOR CERTIFICATE OF CORRECTION**

Dear Sir:

Pursuant to 37 C.F.R. 1.322, the patentee respectfully requests that a Certificate of Correction be issued for the above referenced patent to correct the following errors:

**IN THE TITLE PAGES:**

In Item [56] References Cited, in OTHER PUBLICATIONS:

in Yudin, please replace "Geterotsikicheskikh" with —Geterotsiklicheskikh—;

in the first Yamashkin et al., please replace "Chemistry.of" with —Chemistry of—;

in Edwards, J., et al., please replace "(1999)" with —(1998)—;

in Boyer, M., please replace

"<http://www.australianprescriber.com/magazines/vol19no1/ap19-1-11.htm>(accessed on Jan. 28, 2005)." with —<http://www.australianprescriber.com/magazines/vol19no1/ap19-1-11.htm> (accessed on Jan. 28, 2005).—; and

in Castillo, P., please replace "o-dihdroxyaromatic" with —o-dihydroxyaromatic—.

**CERTIFICATE OF MAILING BY "EXPRESS MAIL"**

"Express Mail" Mailing Label Number EV 740123421 US

Date of Deposit August 9, 2006

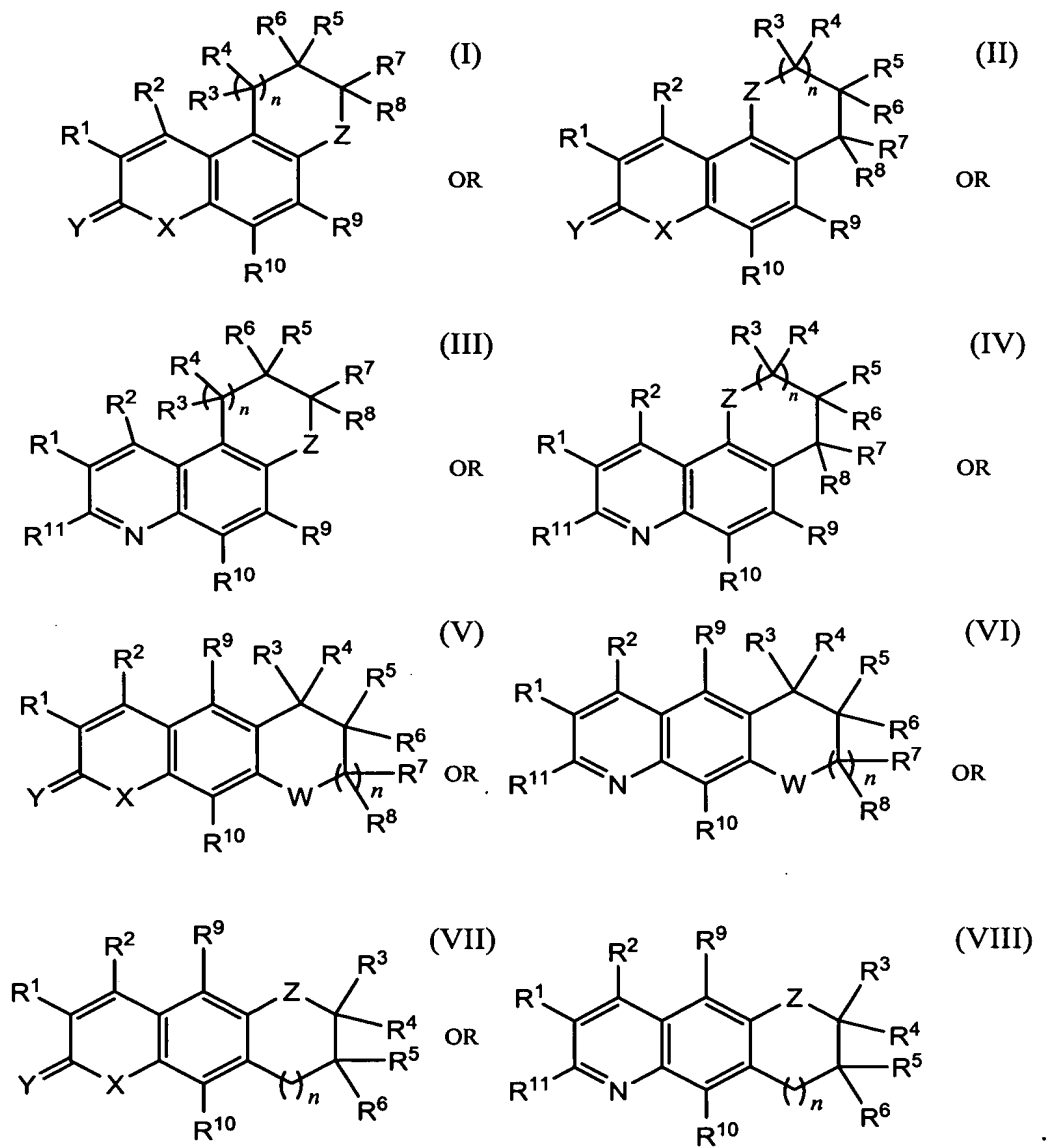
I hereby certify that this paper is being deposited with the United States Postal "Express Mail Post Office to Addressee" Service under 37 CFR §1.10 on the date indicated above and is addressed to: Commissioner for Patents, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA, 22313-1450.

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Stephanie Seidman

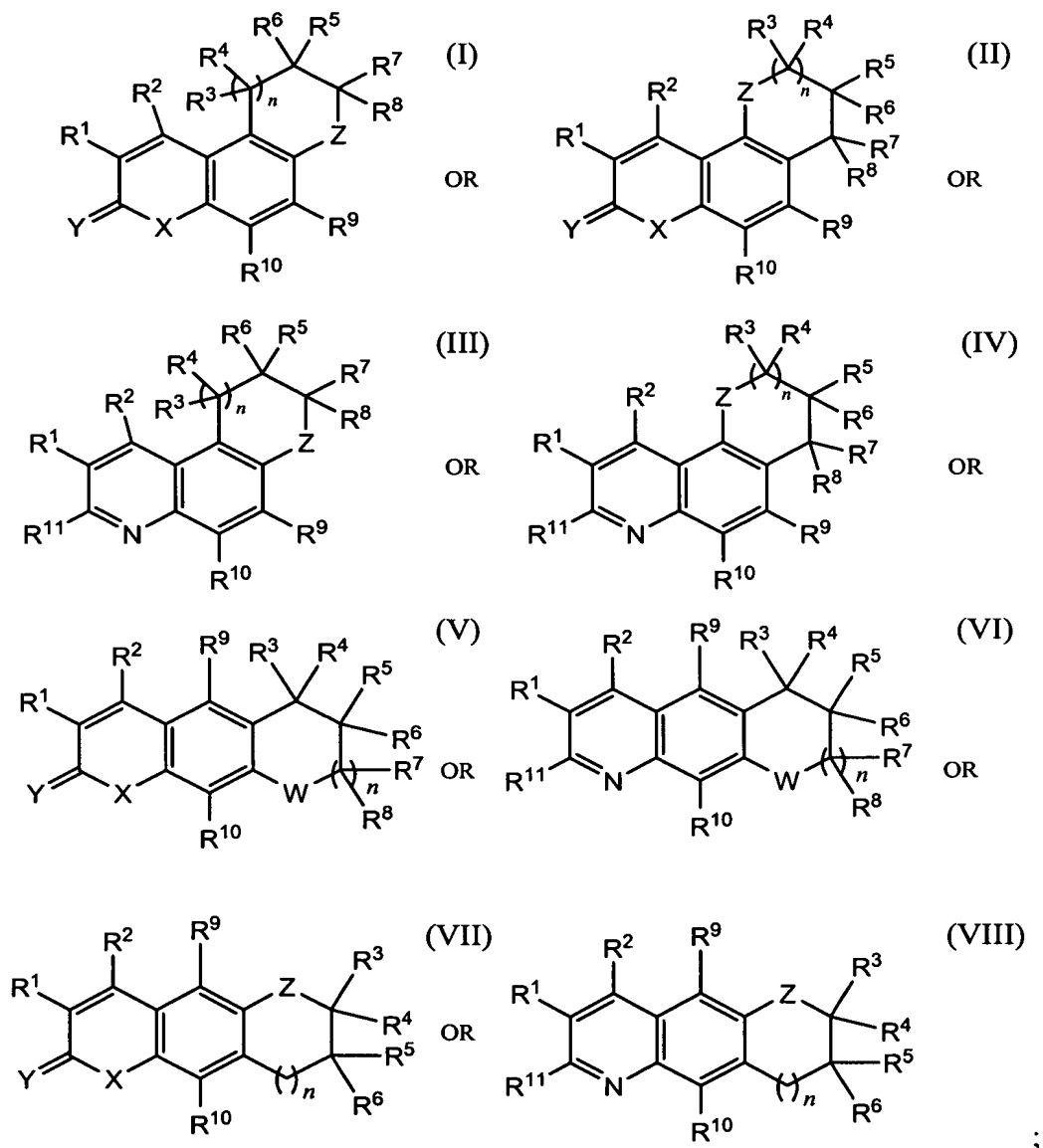
**IN THE SPECIFICATION:**

In column 2, beginning at line 7, please replace formulas I-VIII with:

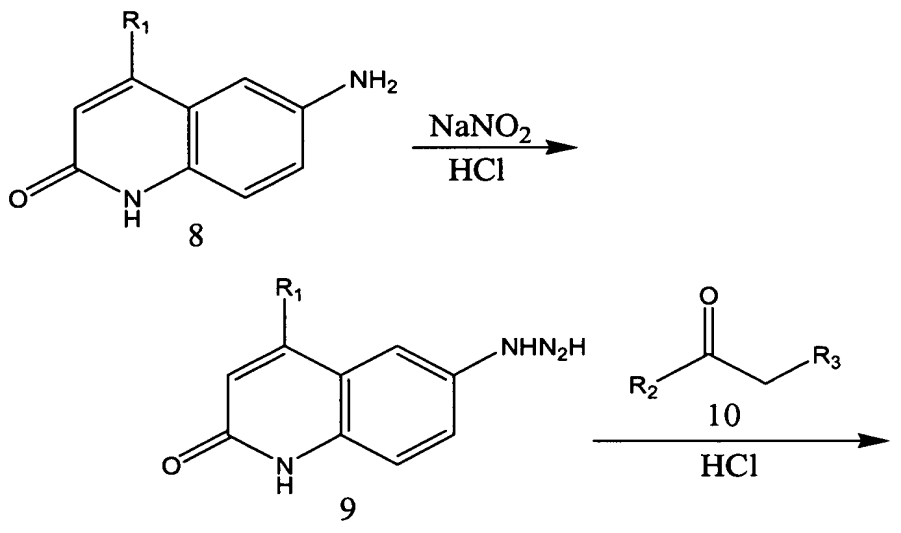


;

in column 7, beginning at line 15, please replace formulas I-VIII with:



in column 24, lines 53-67, please replace the structures in Scheme II with:



in column 57, lines 4-6, please replace

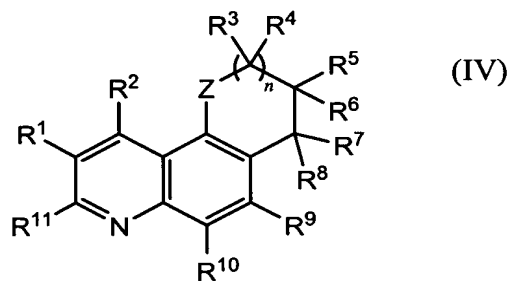
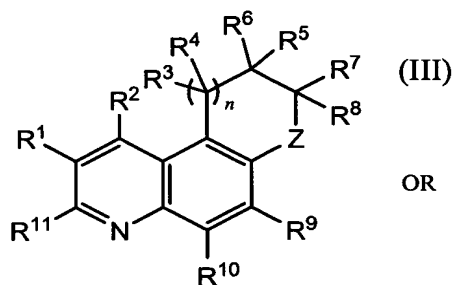
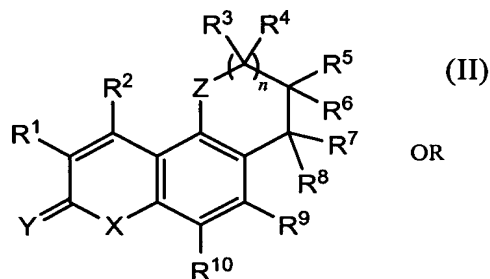
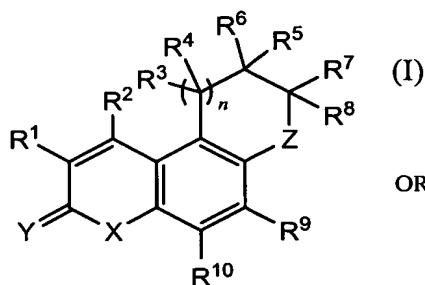
“(Compound 177, Structure 26 of Scheme IV, where R<sub>2</sub>=methyl, R<sub>3</sub>=2-hydroxyethyl)”  
with —(Compound 177, Structure 26 of Scheme IV, where R<sub>2</sub>=methyl, R<sub>3</sub>=2-hydroxyethyl)—; and

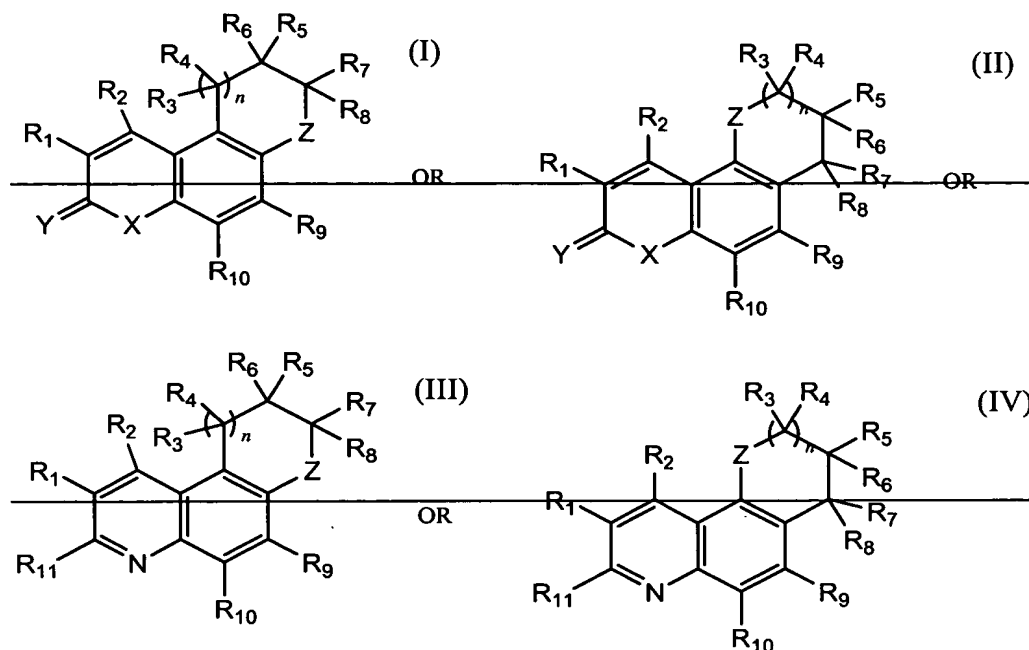
in column 70, line 21, please replace “chloronation” with —chlorination—.

**IN THE CLAIMS:**

Please replace Claims 1, 4, 26, 28, 29, 30, 32, 33, 34, 42, 43, 50, 52, 53, and 60 with the following Claims:

1. A compound of the formula:





wherein:

R<sup>1</sup> is selected from among hydrogen, F, Cl, Br, I, NO<sub>2</sub>, OR<sup>12</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, NR<sup>12</sup>R<sup>12</sup>, substituted C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl and C<sub>1</sub>-C<sub>8</sub> heteroalkyl, wherein the haloalkyl and heteroalkyl groups are optionally substituted;

R<sup>2</sup> is selected from among ~~hydrogen~~, F, Cl, Br, I, CF<sub>3</sub>, CHF<sub>2</sub>, CH<sub>2</sub>F, CF<sub>2</sub>Cl, CN, CF<sub>2</sub>OR<sup>12</sup>, CH<sub>2</sub>OR<sup>12</sup>, OR<sup>12</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, substituted C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkenyl and C<sub>2</sub>-C<sub>8</sub> alkynyl, wherein the ~~alkyl~~, haloalkyl, heteroalkyl, alkenyl and alkynyl groups are optionally substituted;

R<sup>3</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

R<sup>4</sup> is selected from among hydrogen, F, Cl, Br, I, OR<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkynyl, C<sub>2</sub>-C<sub>8</sub> alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;



$R^5$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^6$  is selected from among hydrogen, F, Cl, Br, I,  $OR^{12}$ ,  $NR^{12}R^{13}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl,  $C_2$ - $C_8$  alkynyl,  $C_2$ - $C_8$  alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;

$R^7$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^8$  is selected from among hydrogen, F, Cl, Br, I,  $OR^{12}$ ,  $NR^{12}R^{13}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl,  $C_2$ - $C_8$  alkynyl,  $C_2$ - $C_8$  alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted; or

$R^3$  and  $R^5$  taken together form a bond; or

$R^5$  and  $R^7$  taken together form a bond; or

$R^4$  and  $R^6$  taken together form a three- to eight-membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted; or

$R^6$  and  $R^8$  taken together form a three- to eight-membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted;

$R^9$  and  $R^{10}$  each independently is selected from among hydrogen, F, Cl, Br, I, CN,  $OR^{12}$ ,  $NR^{12}R^{13}$ ,  $C_m(R^{12})_{2m}OR^{13}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $NR^{12}C(O)R^{13}$ ,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl and arylalkyl groups are optionally substituted;

$R^{11}$  is selected from among ~~hydrogen~~, F, Br, Cl, I, CN,  $OR^{14}$ ,  $NR^{14}R^{13}$ , and  $SR^{14}$ ;

$R^{12}$  and  $R^{13}$  each independently is selected from the group of hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl,  $C_2$ - $C_8$  alkenyl,  $C_2$ - $C_8$  alkynyl, heteroaryl and

aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted;

$R^{14}$  is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl, aryl, heteroaryl,  $C(O)R^{15}$ ,  $CO_2R^{15}$  and  $C(O)NR^{15}R^{16}$ , wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups are optionally substituted;

$R^{15}$  and  $R^{16}$  each independently is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

W is O or S;

X is  $N\{R^{14}\}$ ;

Y is selected from among O, S,  $N\{R^{12}\}$  and  $NO\{R^{12}\}$ ;

Z is  $N\{R^{12}\}$ ;

n is 0; and

m is 0 or 1;

or a pharmaceutically acceptable ~~[[salts]]~~ salt thereof.

4. A compound according to claim 1, wherein  $R^2$  is selected from among ~~hydrogen~~, F, Cl, Br,  $CF_3$ ,  $CF_2Cl$ ,  $CF_2H$ ,  $CFH_2$ , substituted  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_4$  haloalkyl,  $C_1$ - $C_4$  heteroalkyl,  $C_2$ - $C_4$  alkenyl and  $C_2$ - $C_4$  alkynyl, wherein the haloalkyl, heteroalkyl, alkenyl and alkynyl groups are optionally substituted.

26. A compound according to claim 1, wherein:

$R^6$  and  $R^8$  each independently is selected from ~~[[are]]~~ among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl,  $C_1$ - $C_6$  heteroalkyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, heteroaryl and aryl groups are optionally substituted; or

$R^6$  and  $R^8$  taken together form a three to eight membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted.

28. A compound according to claim 1, wherein:

$R^1$  is selected from among hydrogen, F, Cl, Br, I, substituted  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the haloalkyl and heteroalkyl groups are optionally substituted;

$R^2$  is selected from among ~~hydrogen~~, F, Cl, Br,  $CF_3$ ,  $CF_2Cl$ ,  $CF_2H$ ,  $CFH_2$ , substituted  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein haloalkyl and heteroalkyl groups are optionally substituted; and

$R^3$  and  $R^4$  each independently is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

29. A compound according to claim 28, wherein:

$R^5$  through  $R^8$  each independently is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; or

$R^6$  and  $R^8$  taken together form a four to six membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring ~~[[are]]~~ is optionally substituted.

30. A compound according to claim 29, wherein:

$R^9$  and  $R^{10}$  each independently is selected from among hydrogen, F, Cl, Br,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^{12}$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl,  $C_2$ - $C_6$  alkenyl,  $C_2$ - $C_6$  alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted; and

$R^{14}$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl,  $C_1$ - $C_6$  heteroalkyl,  $C(O)R^{15}$ ,  $CO_2R^{15}$  and  $C(O)NR^{15}R^{16}$ , wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

32. A compound according to claim 1, wherein said compound is selected from among:

6-Methyl-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-Isopropyl-6-methyl-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-Allyl-6-methyl-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-(4-Methoxyphenyl)-6-methyl-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-(3-Trifluoromethylphenyl)-6-methyl-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

4-Trifluoromethyl-5,6,7,8-tetrahydrocyclopentano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

4-Trifluoromethyl-5,6,7,8,9,10-~~hexahydrocycloheptano~~  
hexahydrocycloheptano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-[[4e]] 4c,5,6,7,7a(cis),8-Hexahydro-8-trifluoroethyl-4-  
trifluoromethylcyclopentano[g]pyrrolo-[3,2-*f*]quinolin-2(1*H*)-one;

(±)-[[4e]] 4c,5,6,7,7a(cis),8-Hexahydro-8-ethyl-4-  
trifluoromethylcyclopentano-[g]pyrrolo[3,2-*f*]-quinolin-2(1*H*)-one;

(±)-5,6-Dihydro-5,6-*cis*-dimethyl-7-(2,2,2-trifluoroethyl)-4-  
trifluoromethyl-7*H*-pyrrolo[3,2-*f*]-quinolin-2(1*H*)-one;

(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-propyl-4-trifluoromethylcyclopentano-[g]pyrrolo-  
[3,2-*f*]quinolin-2(1*H*)-one;

(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(3-furanylmethyl)-4~~trifluoromethylcyclopentano~~  
4-trifluoromethylcyclopentano[g]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(3-thiophenemethyl)-4-  
trifluoromethylcyclopentano[g]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(2-methylpropyl)-4-trifluoromethylcyclopentano[g]-  
pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

- (±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(2,2,2-chlorodifluoro-ethyl)-4-trifluoromethylcyclopentano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
- (±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-cyclopropylmethyl-4-trifluoromethylcyclopentano[g]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
- (±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(2,2-dimethoxyethyl)-4-trifluoromethylcyclopentano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
- (±)-4c,5,6,7,8,8a(*cis*)-Hexahydro-9-(2,2,2-trifluoroethyl)-4-trifluoromethyl-9*H*-cyclohexano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
- (±)-4c,5,6,7,8,9,9a(*cis*),10-Octahydro-10-(2,2,2-trifluoroethyl)-4-trifluoromethylcycloheptano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
- (±)-5,6-*cis*-Dihydro-6-ethyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
- (±)-5,6-*cis*-Dihydro-5-butyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
- (±)-5,6-*cis*-Dihydro-5-(4-nitrophenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
- (±)-5,6-*cis*-Dihydro-5-(4-dimethylaminophenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
- (±)-5,6-*cis*-Dihydro-5-(4-methoxyphenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
- (±)-5,6-*cis*-Dihydro-5-(3-trifluoromethylphenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
- (±)-5,6-*cis*-Dihydro-5-(4-fluorophenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
- (±)-5,6-Dihydro-5-phenyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
- (±)-5,6-*cis*-Dihydro-5-(4-methoxyphenyl)-6-methyl-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-5-(4-methoxyphenyl)-6-methyl-7-(2,2-dimethoxyethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-5-isopropyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-Dihydro-5-ethyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-Dihydro-5-ethyl-6-propyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-Dihydro-5-(2-ethoxycarbonyl-ethyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5,6-Dimethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

6-Methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

6-Ethyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-Ethyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-Ethyl-6-propyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5,6,7,8-Tetrahydro-8-(2,2,2-trifluoroethyl)-4-trifluoromethylcyclopentano[g]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

8-Trifluoroethyl-4-trifluoromethyl-6,8-dihydrocyclopentano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

9-Trifluoroethyl-4-trifluoromethyl-9*H*-benzo[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-(3-Trifluoromethylphenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-(4-Fluorophenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-(2-Ethoxycarbonyl-ethyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;  
5-Hydroxymethyl-6-ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;  
5-Methyl-6-(1-hydroxyethyl)-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;  
5-Methyl-6-acetyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;  
5-Formyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;  
5-Acetyloxymethyl-6-ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;  
2-Acetyloxy-5-hydroxymethyl-6-ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinoline;  
6-Ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;  
5-Ethoxymethyl-6-ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;  
(+)-6-(1-Methoxyethyl)-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;  
7-Allyl-6-methyl-4-trifluoromethyl-5H-pyrrolo[2,3-f]quinolin-2(1H)-one;  
6-Ethyl-7-methyl-4-trifluoromethyl-5H-pyrrolo[2,3-f]quinolin-2(1H)-one;  
7-(3-Trifluoromethylphenyl)-6-methyl-4-trifluoromethyl-5H-pyrrolo[2,3-f]quinolin-2(1H)-one;  
7-(2-Hydroxyethyl)-6-methyl-4-trifluoromethyl-5H-pyrrolo[2,3-f]quinolin-2(1H)-one;  
(+)-4c,5,6,7,7a(cis),8-Hexahydro-8-(2,2,2-trifluoroethyl)-4-trifluoromethyl-cyclopentano-[g]-pyrrolo[3,2-f]quinolin-2(1H)-one;  
(-)-4c,5,6,7,7a(cis),8-Hexahydro-8-(2,2,2-trifluoroethyl)-4-trifluoromethylcyclopentano-[g]-pyrrolo[3,2-f]quinolin-2(1H)-one;

(±)-5,6-Dihydro-6-hydroxymethyl-4-trifluoromethylpyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-5,6-Dihydro-7-ethyl-6-hydroxymethyl-4-trifluoromethylpyrrolo[3,2-*f*]quinolin-  
2(1*H*)-one;  
5-Methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethylpyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
6-Formyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-  
2(1*H*)-one; and  
5,6-Dimethyl-7-(2,2-difluorovinyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-  
one.

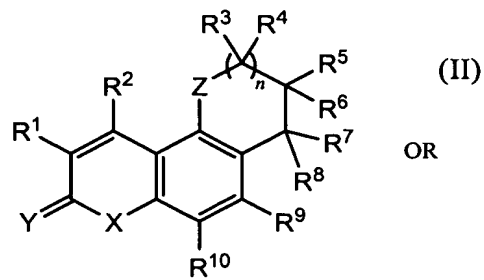
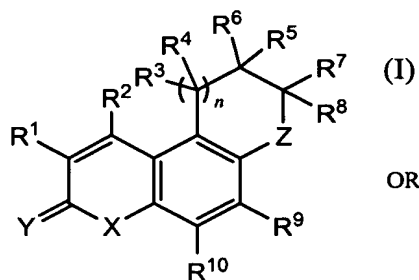
33. A compound according to claim 1, wherein said compound is selected from the group consisting of:

(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(2,2,2-trifluoroethyl)-4-  
trifluoromethylcyclopentano-[g]pyrrolo-[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-ethyl-4-trifluoromethylcyclopentano-[g]pyrrolo  
[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-5,6-Dihydro-5,6-*cis*-dimethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-  
pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-propyl-4-trifluoromethylcyclopentano-[g]pyrrolo-  
[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(2,2,2-chlorodifluoroethyl)-4-trifluoromethylcyclo-  
pentano-[g]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-cyclopropylmethyl-4-trifluoromethyl-  
cyclopentano[g]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-4c,5,6,7,8,8a(*cis*)-Hexahydro-9-(2,2,2-trifluoroethyl)-4-trifluoromethyl-9*H*-cyclo-  
hexano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-5,6-*cis*-Dihydro-6-ethyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-  
pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-5,6-*cis*-Dihydro-5-butyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-



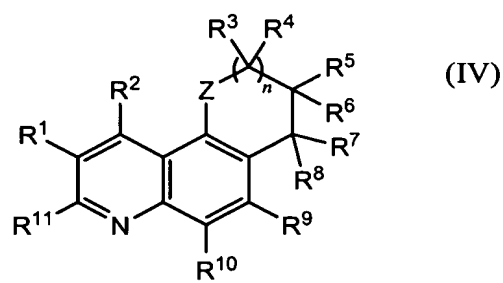
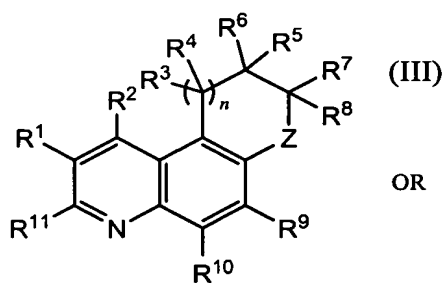
pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-5,6-Dihydro-5-ethyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-  
pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-5,6-Dihydro-5-ethyl-6-propyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-  
pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-5,6-*cis*-Dihydro-5-methyl-6-ethyl-7-(2,2,2-trifluoroethyl)-7*H*-pyrrolo[3,2-*f*]-quinolin-  
2(1*H*)-one;  
5,6-Dimethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-  
one;  
6-Methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
6-Ethyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-  
2(1*H*)-one;  
5-Ethyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-  
2(1*H*)-one;  
5,6,7,8-Tetrahydro-8-trifluoroethyl-4-trifluoromethylcyclopentano[*g*]pyrrolo[3,2-*f*]-  
quinolin-2(1*H*)-one;  
6-Ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(+)-4*c*,5,6,7,7*a*(*cis*),8-Hexahydro-8-(2,2,2-trifluoroethyl)-4-trifluoromethyl-  
cyclopentano-[*g*]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one; and  
(-)-4*c*,5,6,7,7*a*(*cis*),8-Hexahydro-8-(2,2,2-trifluoroethyl)-4-trifluoromethylcyclopentano-  
[*g*]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one.

34. A pharmaceutical composition, comprising:  
 a pharmaceutically acceptable carrier; and  
 a compound of formula:

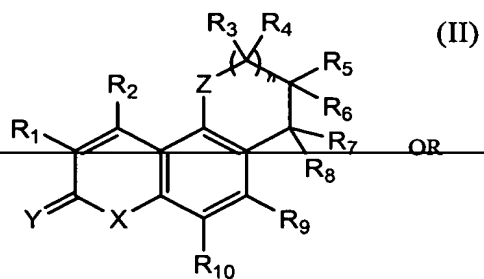
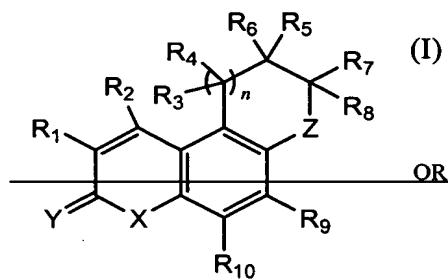


OR

OR

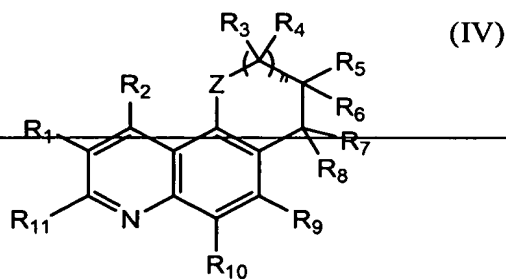
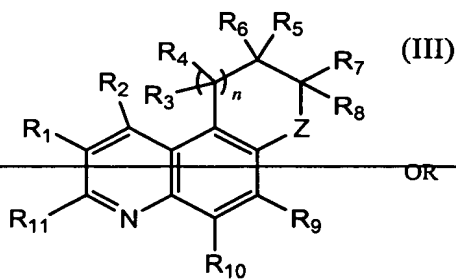


OR



OR

OR



OR

wherein:

$R^1$  is selected from among hydrogen, F, Cl, Br, I,  $\text{NO}_2$ ,  $\text{OR}^{12}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  $\text{NR}^{12}\text{R}^{13}$ ,  $\text{C}_1\text{-C}_8$  alkyl,  $\text{C}_1\text{-C}_8$  haloalkyl and  $\text{C}_1\text{-C}_8$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^2$  is selected from among F, Cl, Br, I,  $\text{CF}_3$ ,  $\text{CHF}_2$ ,  $\text{CH}_2\text{F}$ ,  $\text{CF}_2\text{Cl}$ , CN,  $\text{CF}_2\text{OR}^{12}$ ,  $\text{CH}_2\text{OR}^{12}$ ,  $\text{OR}^{12}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  ~~$\text{NR}^{12}\text{R}^{13}$~~   $\text{NR}^{12}\text{R}^{13}$ , substituted  $\text{C}_1\text{-C}_8$  alkyl,  $\text{C}_1\text{-C}_8$  haloalkyl,  $\text{C}_1\text{-C}_8$  heteroalkyl,  $\text{C}_2\text{-C}_8$  alkenyl and  $\text{C}_2\text{-C}_8$  alkynyl, wherein the haloalkyl, heteroalkyl, alkenyl and alkynyl groups are optionally substituted;

$R^3$  is selected from among hydrogen,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_1\text{-C}_6$  haloalkyl and  $\text{C}_1\text{-C}_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^4$  is selected from among hydrogen, F, Cl, Br, I,  $\text{OR}^{12}$ ,  $\text{NR}^{12}\text{R}^{13}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  $\text{C}_1\text{-C}_8$  alkyl,  $\text{C}_1\text{-C}_8$  haloalkyl,  $\text{C}_1\text{-C}_8$  heteroalkyl,  $\text{C}_2\text{-C}_8$  alkynyl,  $\text{C}_2\text{-C}_8$  alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;

$R^5$  is selected from among hydrogen,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_1\text{-C}_6$  ~~haleroalkyl~~ haloalkyl and  $\text{C}_1\text{-C}_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^6$  is selected from among hydrogen, F, Cl, Br, I,  $\text{OR}^{12}$ ,  $\text{NR}^{12}\text{R}^{13}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  $\text{C}_1\text{-C}_8$  alkyl,  $\text{C}_1\text{-C}_8$  haloalkyl,  $\text{C}_1\text{-C}_8$  heteroalkyl,  $\text{C}_2\text{-C}_8$  alkynyl,  $\text{C}_2\text{-C}_8$  alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;

$R^7$  is selected from among hydrogen,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_1\text{-C}_6$  ~~haleroalkyl~~ haloalkyl and  $\text{C}_1\text{-C}_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^8$  is selected from among hydrogen, F, Cl, Br, I,  $\text{OR}^{12}$ ,  $\text{NR}^{12}\text{R}^{13}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  $\text{C}_1\text{-C}_8$  alkyl,  $\text{C}_1\text{-C}_8$  haloalkyl,  $\text{C}_1\text{-C}_8$  heteroalkyl,  $\text{C}_2\text{-C}_8$  alkynyl,  $\text{C}_2\text{-C}_8$

alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted; or

$R^3$  and  $[[R_5]] R^5$  taken together form a bond; or

$[[R_5]] R^5$  and  $R^7$  taken together form a bond; or

$R^4$  and  $R^6$  taken together form a three- to eight-membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted; or

$R^6$  and  $R^8$  taken together form a three- to eight-membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic or heterocyclic ring is optionally substituted;

$R^9$  and  $R^{10}$  each independently is selected from among hydrogen, F, Cl, Br, I, CN,  $OR^{12}$ ,  $NR^{12}R^{13}$ ,  $C_m(R^{12})_{2m}OR^{13}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $NR^{12}C(O)R^{13}$ ,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl and arylalkyl groups are optionally substituted;

$R^{11}$  is selected from among hydrogen, F, Br, Cl, I, CN,  $OR^{14}$ ,  $NR^{14}R^{13}$  and  $SR^{14}$ ;

$R^{12}$  and  $R^{13}$  each independently is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl,  $C_2$ - $C_8$  alkenyl,  $C_2$ - $C_8$  alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted;

$R^{14}$  is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl, aryl, heteroaryl,  $C(O)R^{15}$ ,  $\underline{CO_2R^{15}}$  and  $C(O)NR^{15}R^{16}$ , wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups are optionally substituted;

$R^{15}$  and  $R^{16}$  each independently is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

W is O or S;

X is  $N\{R^{14}\}$ ;

Y is selected from among O, S,  $N\{R^{12}\}$  and  $N\{OR^{12}\}$ ;

Z is N{R<sup>12</sup>};

n is 0; and

m is 0 or 1;

or a pharmaceutically acceptable ~~[[salts]]~~ salt thereof.

42. A pharmaceutical composition according to claim 34, wherein R<sup>11</sup> is selected from among ~~hydrogen~~, F, Cl, CN, OR<sup>14</sup>, NR<sup>14</sup>R<sup>13</sup> and SR<sup>14</sup>.

43. A pharmaceutical composition according to claim 42, wherein R<sup>11</sup> is selected from among ~~hydrogen~~, F, Cl, OR<sup>14</sup>, SR<sup>14</sup> and NR<sup>14</sup>R<sup>13</sup>.

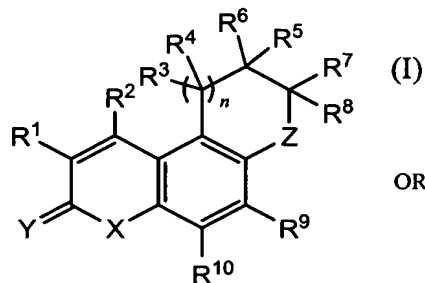
50. A pharmaceutical composition according to claim 49, wherein:

R<sup>5</sup> through R<sup>8</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; or

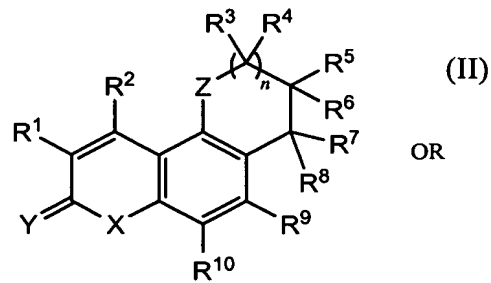
~~[[R<sub>6</sub>]]~~ R<sup>6</sup> and R<sup>8</sup> taken together form a four to six membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted.

52. A pharmaceutical composition according to claim ~~[[50]]~~ 51, wherein Y is O or S.

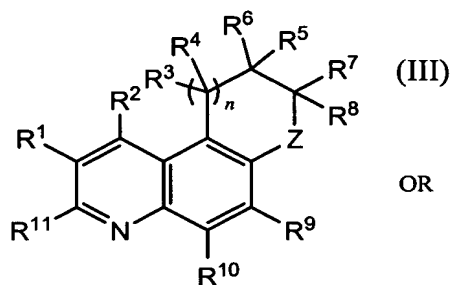
53. A compound of formula:



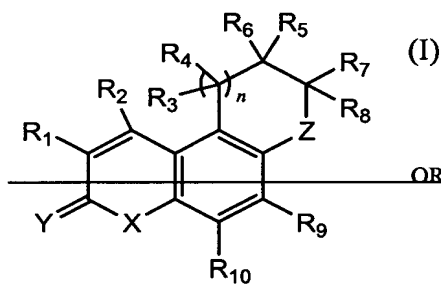
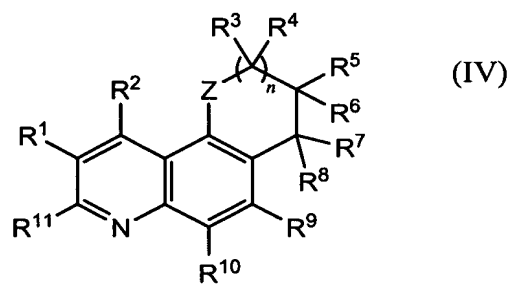
OR



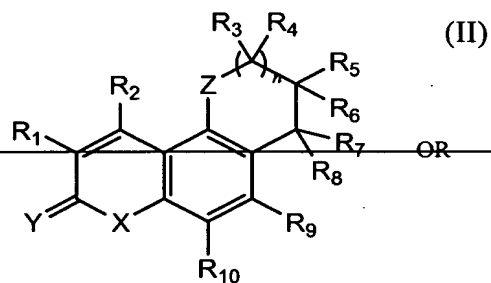
OR



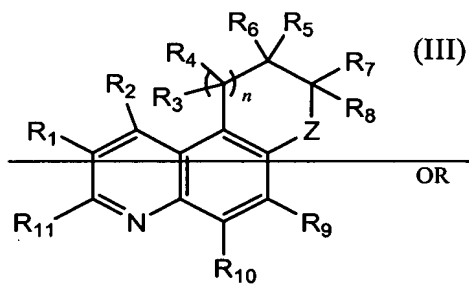
OR



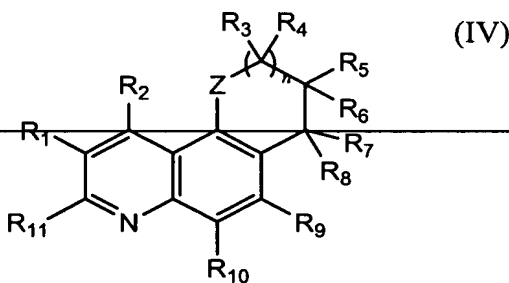
OR



OR



OR



wherein:

$R^1$  is selected from among hydrogen, F, Cl, Br, I,  $NO_2$ ,  $OR^{12}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $NR^{12}R^{12}$ ,  $NR^{12}R^{12}$ ,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl and  $C_1$ - $C_8$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^2$  is selected from among ~~hydrogen~~, F, Cl, Br,  $CF_3$ ,  $CHF_2$ ,  $CH_2F$ ,  $CF_2Cl$ ,  $CF_2OR^{12}$ ,  $CH_2OR^{12}$ ,  $OR^{12}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $NR^{12}R^{13}$ , substituted  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl, and  $C_1$ - $C_6$  heteroalkyl, wherein the haloalkyl, and heteroalkyl groups are optionally substituted;

$R^3$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^4$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^5$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^6$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl,  $C_1$ - $C_6$  heteroalkyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, heteroaryl and aryl groups are optionally substituted;

$R^7$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^8$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl,  $C_1$ - $C_6$  heteroalkyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, heteroaryl and aryl groups are optionally substituted; or

$R^3$  and  $[[R_5]] R^5$  taken together form a bond; or

$[[R_5]] R^5$  and  $R^7$  taken together form a bond; or

$R^4$  and  $R^6$  taken together form a three- to eight-membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted; or

$R^6$  and  $R^8$  taken together form a three- to eight-membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted;

$R^9$  and  $R^{10}$  each independently is selected from among hydrogen, F, Cl, Br, I, CN,  $OR^{12}$ ,  $NR^{12}R^{13}$ ,  $C_m(R^{12})_{2m}OR^{13}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $NR^{12}C(O)R^{13}$ ,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl and arylalkyl groups are optionally substituted;

$R^{11}$  is selected from among ~~hydrogen~~, F, Br, Cl, I, CN,  $OR^{14}$ ,  $NR^{14}R^{13}$  and  $SR^{14}$ ;

$R^{12}$  and  $R^{13}$  each independently is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl,  $C_2$ - $C_8$  alkenyl,  $C_2$ - $C_8$  alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted;

$R^{14}$  is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl, aryl, heteroaryl,  $C(O)R^{15}$ ,  $CO_2R^{15}$  and  $C(O)NR^{15}R^{16}$ , wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups are optionally substituted;

$R^{15}$  and  $R^{16}$  each independently is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

W is O or S;

X is  $N\{R^{14}\}$ ;

Y is selected from the ~~groups~~ group of O, S,  $N\{R^{12}\}$  and  $NO\{R^{12}\}$ ;

Z is  $N\{R^{12}\}$ ;

n is 0; and

m is 0 or 1;

or a pharmaceutically acceptable ~~[[salts]]~~ salt thereof.



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R<sup>5</sup> and R<sup>7</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl[[]] and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; or

$R^5$  and  $R^7$  taken together form a bond.

## REMARKS

A Certificate of Correction (Form PTO-1050) incorporating the above changes is included with this Request. Since not all the errors are those of the Patent Office, a check is enclosed to cover the required fee. If it is determined that the fee amount is incorrect or if the check is missing, the Office is hereby authorized to charge the fee to Deposit Account No. 06-1050.

This Certificate of Correction seeks to correct typographical, formatting and spelling errors introduced by the PTO in the "OTHER PUBLICATIONS" section of the References Cited, Item [56].

This Certificate of Correction seeks to correct spelling, grammatical, and formatting errors in the Specification introduced by the PTO and the applicant. The correction to formulas I-VIII beginning at column 2, line 7 and at column 7, beginning at line 15 seeks to correct formatting errors in the R group numbers. The R group numbers should be displayed as superscripts instead of subscripts in accordance with the R group definitions found in columns 3-4 and columns 8-9, respectively. The correction at column 24, lines 53-67 seeks to remove the overlap introduced by the PTO of compound number "8" and the "R<sub>1</sub>" group of compound 9 in Scheme II. The correction at column 57, lines 4-6 seeks to correct errors introduced by the PTO by replacing the period with a comma and inserting a closed parenthesis symbol as found on page 76, line 13 of the originally filed application. The correction at column 70, line 21 seeks to correct the obvious spelling error in the word "chlorination."

This Certificate of Correction seeks to correct omissions, formatting, and spelling errors in the Claims. Claim 1 is amended to correct formatting errors in the R group numbers of formula I-IV at column 77, lines 25-65. The R group numbers should be displayed as superscripts instead of subscripts in accordance with the R group definitions found in columns 78-79. The error in Claim 1 at column 78, line 3 (which was previously amended in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is attached herewith as evidence), is corrected by inserting the word "substituted" between "NR<sup>12</sup>R<sup>12</sup>," and "C<sub>1</sub>-C<sub>8</sub>."

The error in Claim 1 at column 78, line 7 (which was previously amended in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is attached herewith as evidence), is corrected by deleting the word "hydrogen." The error in Claim 1 at column 78, line 8 is corrected by inserting in R group number "12" as found on page 112, line 9 of the originally filed application. The error in Claim 1 at column 78, line 11 (which was previously amended in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is attached herewith as evidence), is corrected by deleting the word "alkyl." The error in Claim 1 at column 78, line 63 (which was previously amended in the Amendment and Response, mailed on Nov. 17, 2003, a copy of which is attached herewith as evidence), is corrected by deleting the word "hydrogen." The error introduced by the PTO in Claim 1 at column 79, line 19 is corrected by replacing the plural form of the word "salt" with its singular form (which was previously amended in the Amendment and Response, mailed on Nov. 17, 2003, a copy of which is attached herewith as evidence).

Claim 4 is amended to correct the error introduced by the PTO at column 79, line 29 (which was previously amended in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is attached herewith as evidence), by deleting the word "hydrogen."

Claim 26 is amended to correct the error introduced by the PTO at column 80, line 52 (which was previously amended in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is attached herewith as evidence), by replacing the word "are" with "among."

Claim 28 is amended to correct the error introduced by the PTO at column 81, line 6 (which was previously amended in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is attached herewith as evidence), by deleting the word "hydrogen." The error in Claim 28 at column 81, line 7 is corrected by replacing the semicolon with a comma.

Claim 29 is amended to correct the grammatical error at column 81, line 21 by replacing the word "are" with "is."

Claim 30 is amended to correct the grammatical error at column 81, line 27 by inserting a comma between "C<sub>1</sub>-C<sub>6</sub> alkyl" and "C<sub>1</sub>-C<sub>6</sub>" as found on page 119, line 12 of the originally filed application.

Claim 32 is amended to correct the spelling error introduced by the PTO at column 81, line 54 by replacing "hexahydrocycloheptano" with "hexahydrocycloheptano" as found on page 120, line 17 of the originally filed application. The spelling errors introduced by the PTO in Claim 32 at column 81, lines 56 and 59 is corrected by replacing "4e" with "4c" as found on page 120, lines 18 and 22 of the originally filed application. The correction to Claim 32 at column 82, line 2 seeks to correct a typographical error by inserting a dash between "4" and "trifluoromethylcyclopentano" as found on page 121, line 5 of the originally filed application.

Claim 33 is amended to correct the name of the compound beginning at column 84, line 10 by inserting "(2,2,2-trifluoroethyl)" between "7-" and "4." The basis for this correction is found in the Specification at column 43, lines 26-28 where the correct name of Compound 123 is presented.

Claim 34 is amended to correct formatting errors in the R group numbers of formula I-IV at column 85, lines 1-45. The R group numbers should be displayed as superscripts instead of subscripts in accordance with the R group definitions found in columns 85-86. The formatting error introduced by the PTO in Claim 34 at column 85, line 54 is corrected by removing the superscripting from "NR" of list item "NR<sup>12</sup>R<sup>13</sup>." The spelling errors introduced by the PTO in Claim 34 at column 86, lines 5 and 16 are corrected by replacing "haloroalkyl" with "haloalkyl." The formatting errors introduced by the PTO in Claim 34 at column 86, lines 26 and 27 are corrected by replacing "R<sub>5</sub>" with "R<sup>5</sup>" as found in the originally filed application at page 131, lines 13 and 14. The formatting error in Claim 34 at column 86, line 53 is corrected by replacing "CO<sub>2</sub>R<sup>15</sup>" with "CO<sub>2</sub>R<sup>15</sup>" as found in the originally filed application at page 132, line 6. The error introduced by the PTO in Claim 34 at column 86, line 67 is corrected by replacing the plural form of the word "salt" with its singular form (which was previously amended in the Amendment and Response, mailed on Nov. 17, 2003, a copy of which is attached herewith as evidence).

Claim 42 is amended to correct the error introduced by the PTO at column 87, line 33 (which was previously amended in the Amendment and Response, mailed on Nov. 17, 2003, a copy of which is attached herewith as evidence), by deleting the word "hydrogen."

Claim 43 is amended to correct the error introduced by the PTO at column 87, line 36 (which was previously amended in the Amendment and Response, mailed on Nov. 17, 2003, a copy of which is attached herewith as evidence), by deleting the word "hydrogen." The error in Claim 43 at column 87, line 37 is corrected by inserting the R group number "14" as found on page 134, line 2 of the originally filed application.

Claim 50 is amended to correct the formatting error introduced by the PTO at column 88, line 31 by replacing " $R_6$ " with " $R^6$ " as found in the originally filed application at page 136, line 4.

Claim 52 is amended to correct the error introduced by the PTO at column 88, line 51 in the reference to dependent claim 51 by replacing "50" with "51."

Claim 53 is amended to correct formatting errors in the R group numbers of formula I-IV beginning at column 88, line 55. The R group numbers should be displayed as superscripts instead of subscripts in accordance with the R group definitions found in columns 89-90. The error introduced by the PTO in Claim 53 at column 89, line 38 in list item " $OR^{12}SR^{12}$ " is corrected by inserting a comma and a space between " $OR^{12}$ " and " $SR^{12}$ " as found in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is attached herewith as evidence. The error introduced by the PTO in Claim 53 at column 89, line 38 in list item " $NR^{12}R^{12}$ " is corrected by deleting the space between " $NR^{12}$ " and " $R^{12}$ " as found in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is attached herewith as evidence. The error introduced by the PTO in Claim 53 at column 89, line 42 is corrected by deleting the word "hydrogen" as found in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is attached herewith as evidence. The error in Claim 53 at column 89, line 43 is corrected by inserting the R group number "12" in list item " $CH_2OR^{12}$ " as found in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is attached herewith as evidence.

Claim 53 is further amended to correct a grammatical error at column 89, line 44 by inserting a comma between "alkyl" and " $C_1-C_6$ ." The error introduced by the PTO in Claim 53 at column 89, line 61 is corrected by inserting "heteroalkyl," between " $C_1-C_6$ " and "heteroaryl"

as found in the Amendment and Response, mailed Sep. 15, 2005, a copy of which is herewith attached as evidence. The formatting errors introduced by the PTO in Claim 53 at column 90, lines 5 and 6 are corrected by replacing "R<sub>5</sub>" with "R<sup>5</sup>" as found in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is herewith attached as evidence. The error introduced by the PTO in Claim 53 at column 90, line 19 is corrected by deleting the word "hydrogen" as found in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is herewith attached as evidence. The error introduced by the PTO in Claim 53 at column 90, line 39 is corrected by replacing the plural form of the word "group" with its singular form as found in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is herewith attached as evidence. The error introduced by the PTO in Claim 53 at column 90, line 44 is corrected by replacing the plural form of the word "salt" with its singular form as found in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is attached herewith as evidence.

Claim 60 is amended to correct the grammatical error introduced by the PTO at column 91, line 9 by inserting "and" between "haloalkyl" and "C<sub>1</sub>-C<sub>6</sub>" as found in the Preliminary Amendment, mailed on Jan. 21, 2005, a copy of which is attached herewith as evidence.

This Certificate of Correction seeks to amend these errors in the Title Pages, Specification, and Claims introduced by the Patent and Trademark Office and the applicant. These changes do not constitute new matter. Patentee respectfully requests correction of these errors by issuance of a Certificate of Correction.

Respectfully submitted,

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Stephanie Seidman  
Reg. No. 33,779

Attorney Docket No. 18202-017001 / 1081  
**Address all correspondence to:**  
Stephanie Seidman  
Fish & Richardson P.C.  
12390 El Camino Real  
San Diego, California 92130  
Telephone: (858) 678-4777  
Facsimile: (202) 626-7796  
email: seidman@fr.com  
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Applicant : Lin Zhi *et al.*  
Serial No. : 10/080,926  
Filed : February 22, 2002

Attorney's Docket No.: 119378-00262 / 1081  
**Request for Correction to Issued Certificate of Correction**



**COPY OF PRELIMINARY AMENDMENT  
FILED ON 15 SEPTEMBER 2005**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant : Lin Zhi <i>et al.</i>	Art Unit : 1625
Serial No. : 10/080,926	Examiner : Evelyn Huang
Confirmation No.: 7786	Customer No.: 20985
Filed : February 22, 2002	
Title : <b>TRICYCLIC ANDROGEN RECEPTOR MODULATOR COMPOUNDS AND METHODS</b>	

**Mail Stop Amendment**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**AMENDMENT & RESPONSE**

Dear Sir:

Responsive to the Office Action, mailed April 15, 2005, entry of the following amendments and consideration of the following remarks are respectfully requested.

**Amendments to the specification** begin on page 2 of this paper.

**Amendments to the claims** are reflected in the listing of the claims which begin on page 3 of this paper.

**Remarks/Arguments** begin on page 25 of this paper.

**CERTIFICATE OF MAILING BY "EXPRESS MAIL"**

"Express Mail" Mailing Label Number EV 399316664 US

Date of Deposit: **September 15, 2005**

I hereby certify that this paper is being deposited with the United States Postal "Express Mail Post Office to Addressee" Service under 37 CFR §1.10 on the date indicated above and is addressed to: Mail Stop Amendment, Commissioner for Patents, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA, 22313-1450.

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Stephanie Seidman



**AMENDMENTS TO THE SPECIFICATION:**

**Please amend the paragraph on page 37, lines 3-11 as follows:**

Scheme II describes the synthesis of angular and linear indole/indoline analogues of structures 13-17. Treatment of 6-amino-2-quinolinones of structure 8 with  $\text{NaNO}_2$  in strongly acidic conditions such as concentrated HCl generates ~~hydrozines~~ hydrazines of structure 9. Reaction of compound of structure 9 with a ketone such as structure 10 in acidic conditions affords a mixture of pyrroloquinolinones of structures 11 and 12, which can be separated by chromatography. Reductive alkylation of the indole nitrogen atom in structure 11 or 12 with an acid or aldehyde in the presence of a reducing agent such as  $\text{NaBH}_4$  results in the formation of the reduced and alkylated products of structure 13 or 14. Oxidation of structure 13 or 14 provides analogues of structure 15, 16 or 17.

**Please amend the paragraph on page 39, lines 1-5 as follows:**

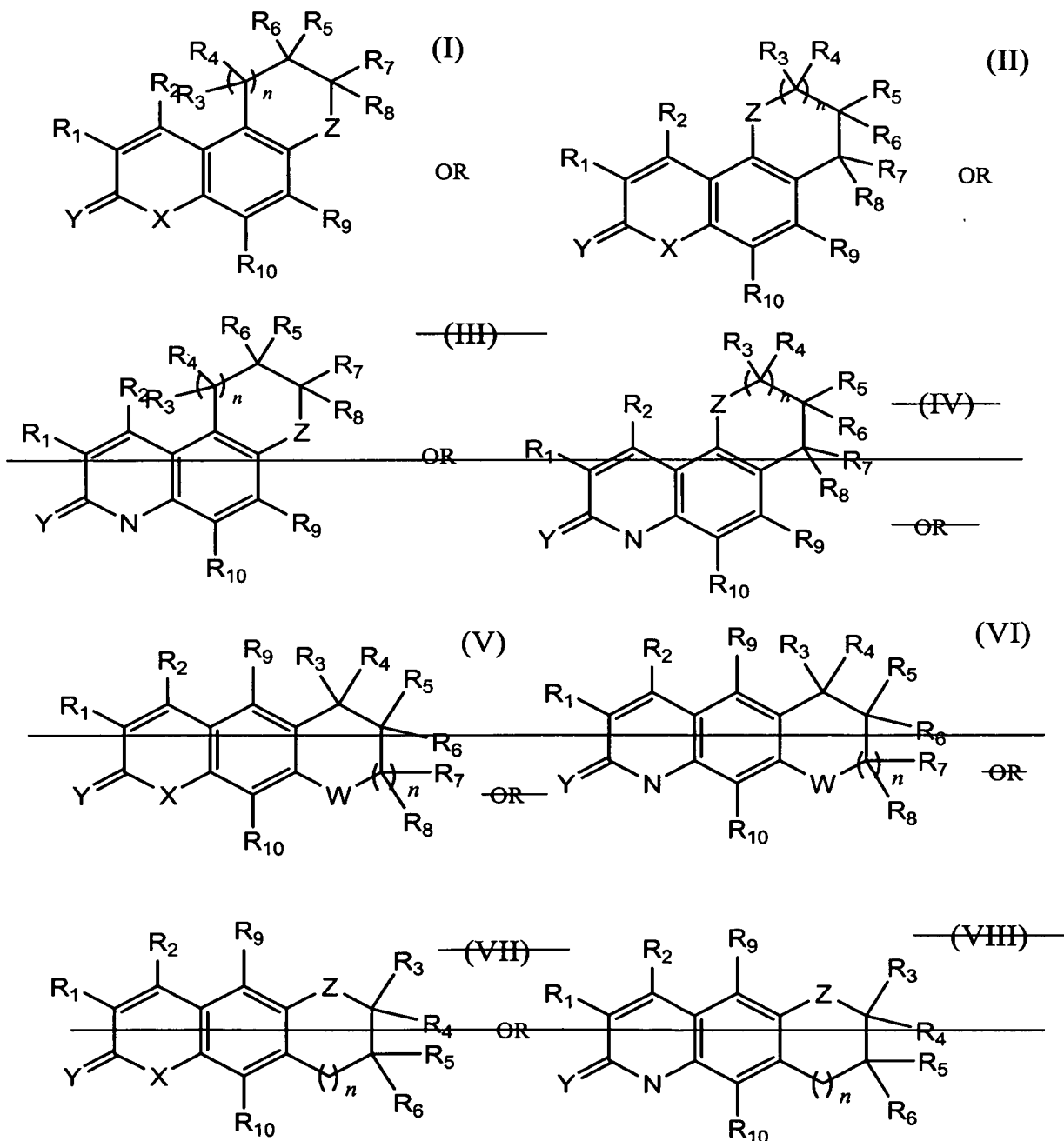
Scheme IV describes the preparation of tricyclic compounds of structure 26 by Fischer indole synthesis. Treatment of the 5-aminoquinolinone of structure 24 with  $\text{NaNO}_2$  in acidic conditions provides the ~~hydrozine~~ hydrazine intermediates of structure 25. Condensation of the ~~hydrozine~~ hydrazine (structure 25) and a ketone of structure 10 followed by acid catalyzed cyclization afford compounds of structure 26.

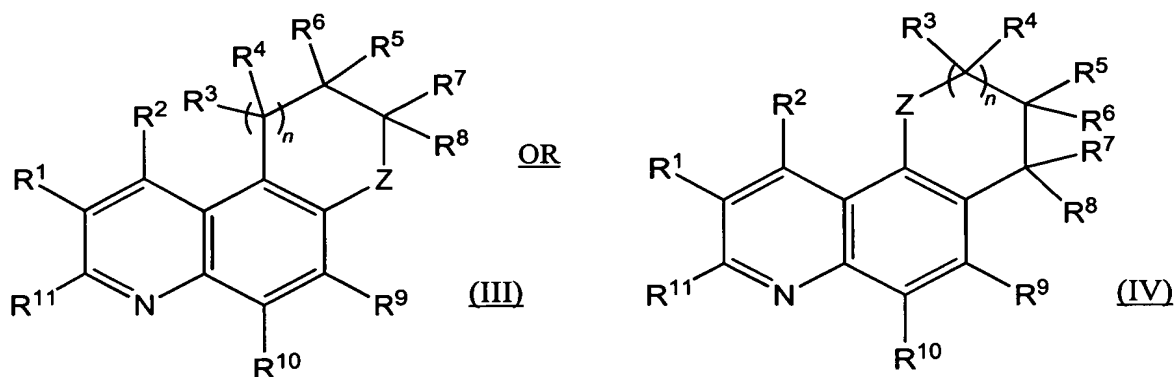
# **AMENDMENTS TO THE CLAIMS:**

Claims 1-17, 23-26, 30-52, 55, 57-63, 98 and 100-107 are pending. Claim 99 is cancelled herein without prejudice or disclaimer. Claims 1, 6, 9, 30, 34-37, 40-42, 46, 57, 59-61, 98, 105 and 107 are amended herein. This listing of claims will replace all prior versions, and listings of claims, in the application.

## **LISTING OF CLAIMS:**

1. (Currently amended) A compound of the formula:





wherein:

R<sup>1</sup> is selected from among hydrogen, F, Cl, Br, I, NO<sub>2</sub>, OR<sup>12</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, NR<sup>12</sup>R<sup>12</sup>, substituted C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl and C<sub>1</sub>-C<sub>8</sub> heteroalkyl, wherein the haloalkyl and heteroalkyl groups are optionally substituted;

R<sup>2</sup> is selected from among F, Cl, Br, I, CF<sub>3</sub>, CHF<sub>2</sub>, CH<sub>2</sub>F, CF<sub>2</sub>Cl, CN, CF<sub>2</sub>OR<sup>12</sup>, CH<sub>2</sub>OR, OR<sup>12</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, substituted C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkenyl and C<sub>2</sub>-C<sub>8</sub> alkynyl, wherein the haloalkyl, heteroalkyl, alkenyl and alkynyl groups are optionally substituted;

~~R<sup>3</sup> through R<sup>8</sup> each independently is selected from among hydrogen, F, Cl, Br, I, OR<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkynyl, C<sub>2</sub>-C<sub>8</sub> alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;~~

R<sup>3</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

R<sup>4</sup> is selected from among hydrogen, F, Cl, Br, I, OR<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkynyl, C<sub>2</sub>-C<sub>8</sub> alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;

R<sup>5</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

R<sup>6</sup> is selected from among hydrogen, F, Cl, Br, I, OR<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkynyl, C<sub>2</sub>-C<sub>8</sub> alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;

R<sup>7</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

R<sup>8</sup> is selected from among hydrogen, F, Cl, Br, I, OR<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkynyl, C<sub>2</sub>-C<sub>8</sub> alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted; or

R<sup>3</sup> and R<sup>5</sup> taken together form a bond; or

R<sup>5</sup> and R<sup>7</sup> taken together form a bond; or

R<sup>4</sup> and R<sup>6</sup> taken together form a three- to eight-membered saturated or unsaturated carbocyclic ~~or heterocyclic~~ ring, wherein the carbocyclic ~~or heterocyclic~~ ring is optionally substituted; or

R<sup>6</sup> and R<sup>8</sup> taken together form a three- to eight-membered saturated or unsaturated carbocyclic ~~or heterocyclic~~ ring, wherein the carbocyclic ~~or heterocyclic~~ ring is optionally substituted;

R<sup>9</sup> and R<sup>10</sup> each independently is selected from among hydrogen, F, Cl, Br, I, CN, OR<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, C<sub>m</sub>(R<sup>12</sup>)<sub>2m</sub>OR<sup>13</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, NR<sup>12</sup>C(O)R<sup>13</sup>, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl and arylalkyl groups are optionally substituted;

R<sup>11</sup> is selected from among F, Br, Cl, I, CN, OR<sup>14</sup>, NR<sup>14</sup>R<sup>13</sup>, and SR<sup>14</sup>;

R<sup>12</sup> and R<sup>13</sup> each independently is selected from the group of hydrogen, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkenyl, C<sub>2</sub>-C<sub>8</sub> alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted;

R<sup>14</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, aryl, heteroaryl, C(O)R<sup>15</sup>, CO<sub>2</sub>R<sup>15</sup> and C(O)NR<sup>15</sup>R<sup>16</sup>, wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups are optionally substituted;

R<sup>15</sup> and R<sup>16</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

W is O or S;

X is N{R<sup>14</sup>};

Y is selected from among O, S, N{R<sup>12</sup>} and NO{R<sup>12</sup>};

Z is N{R<sup>12</sup>};

n is 0; and

m is 0 or 1;

or a pharmaceutically acceptable salt thereof.

2. (Previously presented) A compound according to claim 1, wherein  $R^2$  is selected from among F, Cl, Br,  $CF_3$ ,  $CF_2Cl$ ,  $CF_2H$ ,  $CFH_2$ , substituted  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the haloalkyl and heteroalkyl groups are optionally substituted.

3. (Original) A compound according to claim 1, wherein  $R^2$  is selected from among  $CF_2OR^{12}$ ,  $CH_2OR^{12}$ ,  $OR^{12}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$  and  $NR^{12}R^{13}$ .

4. (Previously presented) A compound according to claim 1, wherein  $R^2$  is selected from among F, Cl, Br,  $CF_3$ ,  $CF_2Cl$ ,  $CF_2H$ ,  $CFH_2$ , substituted  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_4$  haloalkyl,  $C_1$ - $C_4$  heteroalkyl,  $C_2$ - $C_4$  alkenyl and  $C_2$ - $C_4$  alkynyl, wherein the haloalkyl, heteroalkyl, alkenyl and alkynyl groups are optionally substituted.

5. (Previously presented) A compound according to claim 4, wherein  $R^2$  is selected from among F, Cl,  $CF_3$ ,  $CF_2Cl$ ,  $CF_2H$ ,  $CFH_2$  and substituted  $C_1$ - $C_4$  alkyl.

6. (Currently amended) A compound according to claim 1, wherein  $R^9$  and  $R^{10}$  each independently is selected from among hydrogen, F, Cl, Br,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

7. (Previously presented) A compound according to claim 6, wherein  $R^9$  and  $R^{10}$  each independently is selected from among hydrogen, F, Cl,  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_4$  haloalkyl and  $C_1$ - $C_4$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

8. (Previously presented) A compound according to claim 7, wherein  $R^9$  and  $R^{10}$  each independently is selected from among hydrogen, F and  $CH_3$ .

9. (Currently amended) A compound according to claim 1, wherein  $R^1$  is selected from among hydrogen, F, Cl, Br, I, substituted  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the ~~alkyl~~, haloalkyl and heteroalkyl groups are optionally substituted.

10. (Previously presented) A compound according to claim 9, wherein  $R^{11}$  is selected from among hydrogen, F, Cl,  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_4$  haloalkyl and  $C_1$ - $C_4$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

11. (Original) A compound according to claim 9, wherein  $R^1$  is hydrogen or F.

12. (Previously presented) A compound according to claim 1, wherein Y is O or S.
13. (Original) A compound according to claim 12, wherein Y is O. .
14. (Previously presented) A compound according to claim 1, wherein R<sup>11</sup> is selected from among F, Cl, CN, OR<sup>14</sup>, NR<sup>14</sup>R<sup>13</sup> and SR<sup>14</sup>.
15. (Previously presented) A compound according to claim 14, wherein R<sup>11</sup> is selected from among F, Cl, OR<sup>14</sup>, SR<sup>14</sup> and NR<sup>14</sup>R<sup>13</sup>.
16. (Previously presented) A compound according to claim 15, wherein R<sup>11</sup> is selected from among F, Cl, OR<sup>14</sup> and SR<sup>14</sup>.
17. (Original) A compound according to claim 16, wherein R<sup>11</sup> is OR<sup>14</sup>.
- 18-22. (Cancelled)
23. (Previously presented) A compound according to claim 1, wherein R<sup>12</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl, C<sub>1</sub>-C<sub>6</sub> heteroalkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted.
24. (Previously presented) A compound according to claim 23, wherein R<sup>12</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> haloalkyl and C<sub>1</sub>-C<sub>4</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.
25. (Previously presented) A compound according to claim 1, wherein R<sup>13</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl, C<sub>1</sub>-C<sub>6</sub> heteroalkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted.
26. (Previously presented) A compound according to claim 25, wherein R<sup>13</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> haloalkyl and C<sub>1</sub>-C<sub>4</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.
- 27-29. (Cancelled)
30. (Currently amended) A compound according to claim 1, wherein:  
R<sup>3</sup> and R<sup>4</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; or

R<sup>3</sup> and R<sup>5</sup> taken together form a bond; or

R<sup>4</sup> and R<sup>6</sup> taken together form a four to six membered saturated or unsaturated carbocyclic ~~or heterocyclic~~ ring, wherein the carbocyclic ~~or heterocyclic~~ ring are optionally substituted.

31. (Previously presented) A compound according to claim 30, wherein R<sup>3</sup> and R<sup>4</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> haloalkyl and C<sub>1</sub>-C<sub>4</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

32. (Previously presented) A compound according to claim 1, wherein:

R<sup>5</sup> and R<sup>7</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; or

R<sup>5</sup> and R<sup>7</sup> taken together form a bond.

33. (Previously presented) A compound according to claim 32, wherein R<sup>5</sup> and R<sup>7</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> haloalkyl and C<sub>1</sub>-C<sub>4</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

34. (Currently amended) A compound according to claim 1, wherein:

R<sup>6</sup> and R<sup>8</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl, C<sub>1</sub>-C<sub>6</sub> heteroalkyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, heteroaryl and aryl groups are optionally substituted; or

R<sup>6</sup> and R<sup>8</sup> taken together form a three to eight membered saturated or unsaturated carbocyclic ~~or heterocyclic~~ ring, wherein the carbocyclic ~~or heterocyclic~~ ring is optionally substituted.

35. (Currently amended) A compound according to claim 34, wherein:

R<sup>6</sup> and R<sup>8</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> haloalkyl, C<sub>1</sub>-C<sub>4</sub> heteroalkyl, heteroaryl and aryl, wherein alkyl, haloalkyl, heteroaryl and aryl are optionally substituted; or

R<sup>6</sup> and R<sup>8</sup> taken together form a four to six membered saturated or unsaturated carbocyclic ~~or heterocyclic~~ ring, wherein the carbocyclic ~~or heterocyclic~~ ring is optionally substituted.

36. (Currently amended) A compound according to claim 1, wherein:

R<sup>1</sup> is selected from among hydrogen, F, Cl, Br, I, substituted C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the ~~alkyl~~, haloalkyl and heteroalkyl groups are optionally substituted;

$R^2$  is selected from among F, Cl, Br,  $CF_3$ ,  $CF_2Cl$ ,  $CF_2H$ ,  $CFH_2$ , substituted  $C_1-C_6$  alkyl;  $C_1-C_6$  haloalkyl and  $C_1-C_6$  heteroalkyl, wherein haloalkyl and heteroalkyl groups are optionally substituted; and

$R^3$  and  $R^4$  each independently is selected from among hydrogen,  $C_1-C_6$  alkyl,  $C_1-C_6$  haloalkyl and  $C_1-C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

37. (Currently amended) A compound according to claim 36, wherein:

$R^5$  through  $R^8$  each independently is selected from among hydrogen,  $C_1-C_6$  alkyl,  $C_1-C_6$  haloalkyl and  $C_1-C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; or

$R^6$  and  $R^8$  taken together form a four to six membered saturated or unsaturated carbocyclic or heterocyclic ring, wherein the carbocyclic or heterocyclic ring are optionally substituted.

38. (Previously presented) A compound according to claim 37, wherein:

$R^9$  and  $R^{10}$  each independently is selected from among hydrogen, F, Cl, Br,  $C_1-C_6$  alkyl,  $C_1-C_6$  haloalkyl and  $C_1-C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^{12}$  is selected from among hydrogen,  $C_1-C_6$  alkyl,  $C_1-C_6$  haloalkyl and  $C_1-C_6$  heteroalkyl,  $C_2-C_6$  alkenyl,  $C_2-C_6$  alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted; and

$R^{14}$  is selected from among hydrogen,  $C_1-C_6$  alkyl,  $C_1-C_6$  haloalkyl,  $C_1-C_6$  heteroalkyl,  $C(O)R^{15}$ ,  $CO_2R^{15}$  and  $C(O)NR^{15}R^{16}$ , wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

39. (Previously presented) A compound according to claim 38, wherein Y is O or S.

40. (Currently amended) A compound according to claim 1, wherein said compound is selected from among:

6-Methyl-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-Isopropyl-6-methyl-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-Allyl-6-methyl-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-(4-Methoxyphenyl)-6-methyl-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-(3-Trifluoromethylphenyl)-6-methyl-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;



4-Trifluoromethyl-5,6,7,8-tetrahydrocyclopentano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
4-Trifluoromethyl-5,6,7,8,9,10-hexahydrocycloheptano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-trifluoroethyl-4-trifluoromethylcyclopentano[g]pyrrolo-  
[3,2-*f*]quinolin-2(1*H*)-one;  
~~(±)-6,6a,7,8,9,9a(*cis*)-Hexahydro-6-trifluoroethyl-4-trifluoromethylcyclopentano-[i]pyrrole-~~  
~~[2,3-*g*]quinolin-2(1*H*)-one;~~  
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-ethyl-4-trifluoromethylcyclopentano-[g]pyrrolo[3,2-*f*]-  
quinolin-2(1*H*)-one;  
~~(±)-6,6a,7,8,9,9a(*cis*)-Hexahydro-6-ethyl-4-trifluoromethylcyclopentano-[i]pyrrolo[2,3-*g*]-~~  
~~quinolin-2(1*H*)-one;~~  
(±)-5,6-Dihydro-5,6-*cis*-dimethyl-7-~~trifluoroethyl~~ (2,2,2-trifluoroethyl)-4-trifluoromethyl-  
7*H*-pyrrolo[3,2-*f*]-quinolin-2(1*H*)-one;  
~~(±)-7,8-Dihydro-7,8-*cis*-dimethyl-6-trifluoroethyl-4-trifluoromethyl-6*H*-pyrrolo[2,3-*g*]-~~  
~~quinolin-2(1*H*)-one;~~  
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-propyl-4-trifluoromethylcyclopentano-[g]pyrrolo-  
[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(3-furanylmethyl)-4-trifluoromethylcyclopentano[g]-  
pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(3-thiophenemethyl)-4-trifluoromethylcyclopentano[g]-  
pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(2-methylpropyl)-4-trifluoromethylcyclopentano[g]-  
pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(2,2,2-chlorodifluoro-ethyl)-4-trifluoromethylcyclo-  
pentano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-cyclopropylmethyl-4-trifluoromethylcyclopentano[g]-  
pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(2,2-dimethoxyethyl)-4-trifluoromethylcyclo-  
pentano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-4c,5,6,7,8,8a(*cis*)-Hexahydro-9-(2,2,2-trifluoroethyl)-4-trifluoromethyl-9*H*-cyclo-  
hexano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;  
(±)-4c,5,6,7,8,9,9a(*cis*),10-Octahydro-10-(2,2,2-trifluoroethyl)-4-trifluoromethylcyclo-  
heptano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-6-ethyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-5-butyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-5-(4-nitrophenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-5-(4-dimethylaminophenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-5-(4-methoxyphenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-5-(3-trifluoromethylphenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-5-(4-fluorophenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-Dihydro-5-phenyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-5-(4-methoxyphenyl)-6-methyl-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-5-(4-methoxyphenyl)-6-methyl-7-(2,2-dimethoxyethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-5-isopropyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-Dihydro-5-ethyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-Dihydro-5-ethyl-6-propyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-Dihydro-5-(2-ethoxycarbonyl-ethyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5,6-Dimethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

6-Methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

6-Ethyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-Ethyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-Ethyl-6-propyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5,6,7,8-Tetrahydro-8-~~trifluoroethyl~~ (2,2,2-trifluoroethyl)-4-trifluoromethylcyclopentano[*g*]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

8-Trifluoroethyl-4-trifluoromethyl-6,8-dihydrocyclopentano[*g*]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

9-Trifluoroethyl-4-trifluoromethyl-9*H*-benzo[*g*]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

~~6-Trifluoroethyl-4-trifluoromethyl-6,7,8,9-tetrahydrocyclopentano[*i*]-pyrrolo[2,3-*g*]-quinolin-2(1*H*)-one;~~

5-(3-Trifluoromethylphenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-(4-Fluorophenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-(2-Ethoxycarbonyl-ethyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

~~7-Ethyl-8-methyl-6-(2,2,2-trifluoroethyl)-4-trifluoromethyl-6*H*-pyrrolo[2,3-*g*]quinolin-2(1*H*)-one;~~

5-Hydroxymethyl-6-ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-Methyl-6-(1-hydroxyethyl)-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-Methyl-6-acetyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-Formyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-Acetyloxymethyl-6-ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

2-Acetyloxy-5-hydroxymethyl-6-ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinoline;

6-Ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-Ethoxymethyl-6-ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]-quinolin-2(1*H*)-one;

(+)-6-(1-Methoxyethyl)-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

7-Allyl-6-methyl-4-trifluoromethyl-5*H*-pyrrolo[2,3-*f*]quinolin-2(1*H*)-one;

6-Ethyl-7-methyl-4-trifluoromethyl-5*H*-pyrrolo[2,3-*f*]quinolin-2(1*H*)-one;

7-(3-Trifluoromethylphenyl)-6-methyl-4-trifluoromethyl-5*H*-pyrrolo[2,3-*f*]quinolin-2(1*H*)-one;

7-(2-Hydroxyethyl)-6-methyl-4-trifluoromethyl-5*H*-pyrrolo[2,3-*f*]quinolin-2(1*H*)-one;

(+)-4*c*,5,6,7,7*a*(*cis*),8-Hexahydro-8-~~trifluoroethyl~~ (2,2,2-trifluoroethyl)-4-trifluoromethyl-cyclopentano-[*g*]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(-)-4*c*,5,6,7,7*a*(*cis*),8-Hexahydro-8-~~trifluoroethyl~~ (2,2,2-trifluoroethyl)-4-trifluoromethyl-cyclopentano-[*g*]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-Dihydro-6-hydroxymethyl-4-trifluoromethylpyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-Dihydro-7-ethyl-6-hydroxymethyl-4-trifluoromethylpyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

~~7,8-Dihydro-6-(2,2,2-trifluoroethyl)-4-trifluoromethylpyrrolo[2,3-*g*]quinolin-2(1*H*)-one;~~

~~6-(2,2,2-Trifluoroethyl)-4-trifluoromethylpyrrolo[2,3-*g*]quinolin-2(1*H*)-one;~~

~~8-Chloro-6-(2,2,2-trifluoroethyl)-4-trifluoromethylpyrrolo[2,3-*g*]quinolin-2(1*H*)-one;~~

5-Methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethylpyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

6-Formyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one; and

5,6-Dimethyl-7-(2,2-difluorovinyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one.

41. (Currently amended) A compound according to claim 1, wherein said compound is selected from the group consisting of:

(±)-4*c*,5,6,7,7*a*(*cis*),8-Hexahydro-8-~~trifluoroethyl~~ (2,2,2-trifluoroethyl)-4-trifluoromethyl-cyclopentano-[*g*]pyrrolo-[3,2-*f*]quinolin-2(1*H*)-one;

~~(±)-6,6*a*,7,8,9,9*a*(*cis*)-Hexahydro-6-trifluoroethyl-4-trifluoromethylcyclopentano-[*i*]pyrrolo-[2,3-*g*]quinolin-2(1*H*)-one;~~

(±)-4*c*,5,6,7,7*a*(*cis*),8-Hexahydro-8-ethyl-4-trifluoromethylcyclopentano-[*g*]pyrrolo[3,2-*f*]-quinolin-2(1*H*)-one;

(±)-5,6-Dihydro-5,6-*cis*-dimethyl-7-~~trifluoroethyl~~-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]-quinolin-2(1*H*)-one;

~~(±)-7,8-Dihydro-7,8-*cis*-dimethyl-6-trifluoroethyl-4-trifluoromethyl-6*H*-pyrrolo[2,3-*g*]-quinolin-2(1*H*)-one;~~

(±)-4*c*,5,6,7,7*a*(*cis*),8-Hexahydro-8-propyl-4-trifluoromethylcyclopentano-[*g*]pyrrolo-[3,2-*f*]quinolin-2(1*H*)-one;

(±)-4*c*,5,6,7,7*a*(*cis*),8-Hexahydro-8-(2,2,2-chlorodifluoroethyl)-4-trifluoromethylcyclopentano-[*g*]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-4*c*,5,6,7,7*a*(*cis*),8-Hexahydro-8-cyclopropylmethyl-4-trifluoromethyl-cyclopentano[*g*]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-4*c*,5,6,7,8,8*a*(*cis*)-Hexahydro-9-(2,2,2-trifluoroethyl)-4-trifluoromethyl-9*H*-cyclohexano[*g*]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-6-ethyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-5-butyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-Dihydro-5-ethyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-Dihydro-5-ethyl-6-propyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(±)-5,6-*cis*-Dihydro-5-methyl-6-ethyl-7-(2,2,2-trifluoroethyl)-7*H*-pyrrolo[3,2-*f*]-quinolin-2(1*H*)-one;

5,6-Dimethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

6-Methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

6-Ethyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5-Ethyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

5,6,7,8-Tetrahydro-8-trifluoroethyl-4-trifluoromethylcyclopentano[*g*]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

~~6-Trifluoroethyl-4-trifluoromethyl-6,7,8,9-tetrahydrocyclopentano[*i*]pyrrolo[2,3-*g*]-quinolin-2(1*H*)-one;~~

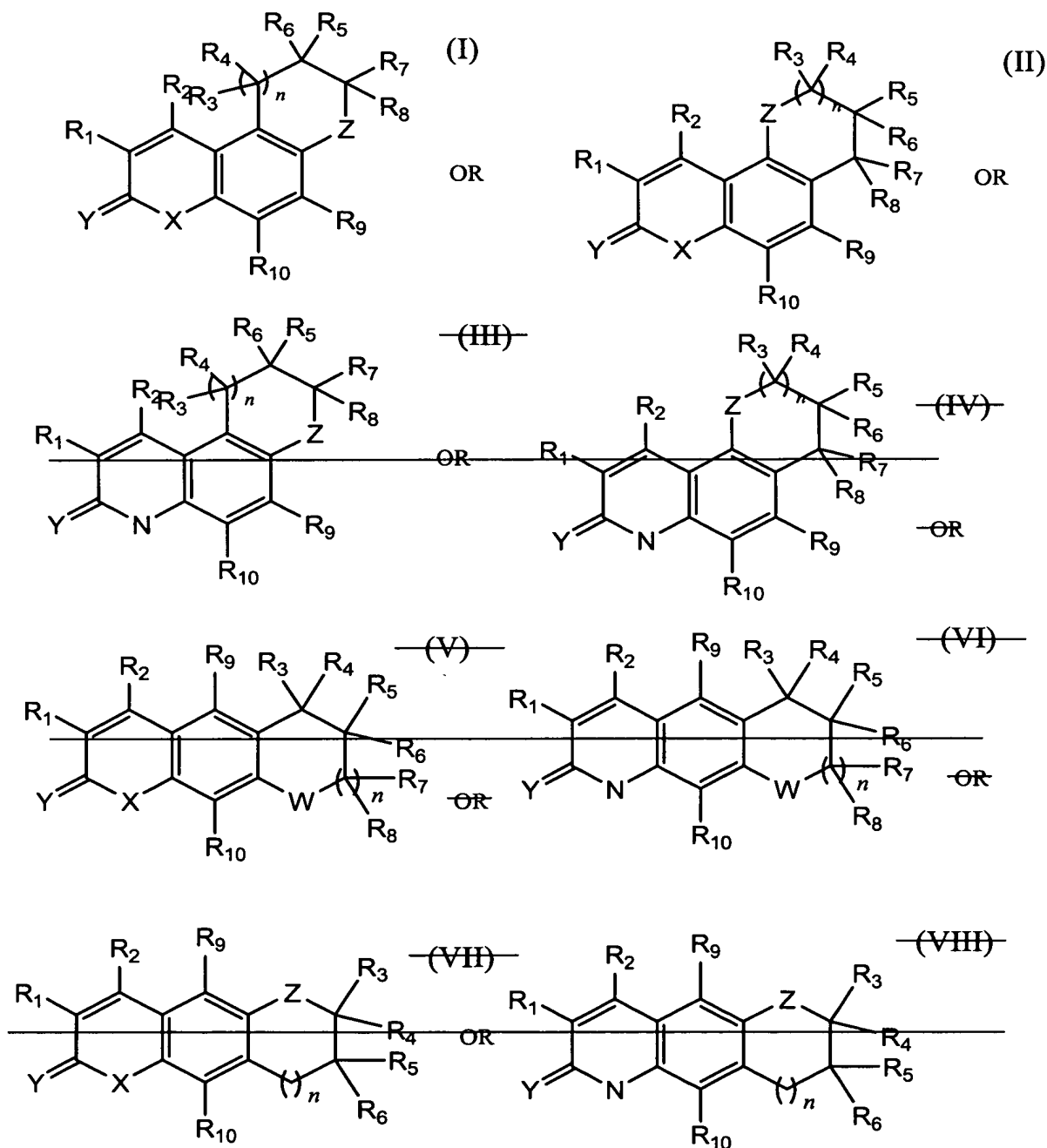
~~7-Ethyl-8-methyl-6-(2,2,2-trifluoroethyl)-4-trifluoromethyl-6*H*-pyrrolo[2,3-*g*]quinolin-2(1*H*)-one;~~

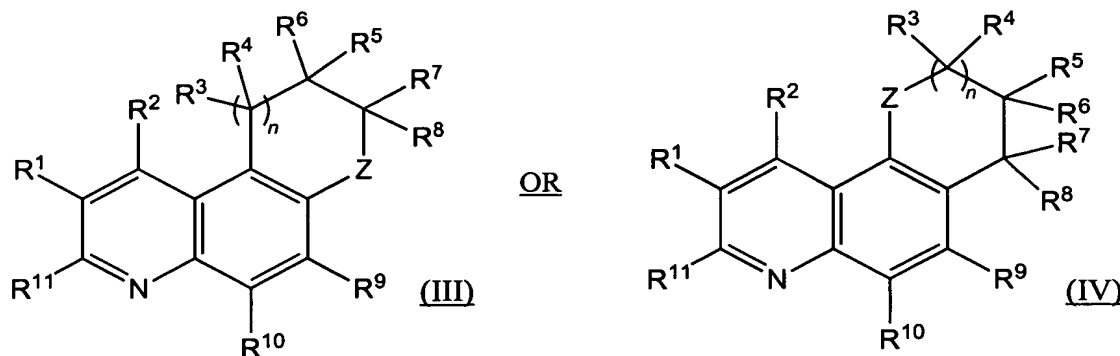
6-Ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

(+)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-~~trifluoroethyl~~ (2,2,2-trifluoroethyl)-4-trifluoromethyl-cyclopentano-[g]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one; and

(-)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-~~trifluoroethyl~~ (2,2,2-trifluoroethyl)-4-trifluoromethyl-cyclopentano-[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one.

42. (Currently amended) A pharmaceutical composition, comprising:  
 a pharmaceutically acceptable carrier; and  
 a compound of formula:





wherein:

$R^1$  is selected from among hydrogen, F, Cl, Br, I,  $\text{NO}_2$ ,  $\text{OR}^{12}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  $\text{NR}^{12}\text{R}^{13}$ ,  $\text{C}_1\text{-C}_8$  alkyl,  $\text{C}_1\text{-C}_8$  haloalkyl and  $\text{C}_1\text{-C}_8$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^2$  is selected from among F, Cl, Br, I,  $\text{CF}_3$ ,  $\text{CHF}_2$ ,  $\text{CH}_2\text{F}$ ,  $\text{CF}_2\text{Cl}$ , CN,  $\text{CF}_2\text{OR}^{12}$ ,  $\text{CH}_2\text{OR}^{12}$ ,  $\text{OR}^{12}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  $\text{NR}^{12}\text{R}^{13}$ , substituted  $\text{C}_1\text{-C}_8$  alkyl,  $\text{C}_1\text{-C}_8$  haloalkyl,  $\text{C}_1\text{-C}_8$  heteroalkyl,  $\text{C}_2\text{-C}_8$  alkenyl and  $\text{C}_2\text{-C}_8$  alkynyl, wherein the haloalkyl, heteroalkyl, alkenyl and alkynyl groups are optionally substituted;

~~$R^3$  through  $R^8$  each independently is selected from among hydrogen, F, Cl, Br, I,  $\text{OR}^{12}$ ,  $\text{NR}^{12}\text{R}^{13}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  $\text{C}_1\text{-C}_8$  alkyl,  $\text{C}_1\text{-C}_8$  haloalkyl,  $\text{C}_1\text{-C}_8$  heteroalkyl,  $\text{C}_2\text{-C}_8$  alkynyl,  $\text{C}_2\text{-C}_8$  alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;~~

$R^3$  is selected from among hydrogen,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_1\text{-C}_6$  haloalkyl and  $\text{C}_1\text{-C}_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^4$  is selected from among hydrogen, F, Cl, Br, I,  $\text{OR}^{12}$ ,  $\text{NR}^{12}\text{R}^{13}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  $\text{C}_1\text{-C}_8$  alkyl,  $\text{C}_1\text{-C}_8$  haloalkyl,  $\text{C}_1\text{-C}_8$  heteroalkyl,  $\text{C}_2\text{-C}_8$  alkynyl,  $\text{C}_2\text{-C}_8$  alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;

$R^5$  is selected from among hydrogen,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_1\text{-C}_6$  haloalkyl and  $\text{C}_1\text{-C}_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^6$  is selected from among hydrogen, F, Cl, Br, I,  $\text{OR}^{12}$ ,  $\text{NR}^{12}\text{R}^{13}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  $\text{C}_1\text{-C}_8$  alkyl,  $\text{C}_1\text{-C}_8$  haloalkyl,  $\text{C}_1\text{-C}_8$  heteroalkyl,  $\text{C}_2\text{-C}_8$  alkynyl,  $\text{C}_2\text{-C}_8$  alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;

R<sup>7</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

R<sup>8</sup> is selected from among hydrogen, F, Cl, Br, I, OR<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkynyl, C<sub>2</sub>-C<sub>8</sub> alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted; or

R<sup>3</sup> and R<sup>5</sup> taken together form a bond; or

R<sup>5</sup> and R<sup>7</sup> taken together form a bond; or

R<sup>4</sup> and R<sup>6</sup> taken together form a three- to eight-membered saturated or unsaturated carbocyclic ~~or heterocyclic~~ ring, wherein the carbocyclic ~~or heterocyclic~~ ring is optionally substituted; or

R<sup>6</sup> and R<sup>8</sup> taken together form a three- to eight-membered saturated or unsaturated carbocyclic ~~or heterocyclic~~ ring, wherein the carbocyclic ~~or heterocyclic~~ ring is optionally substituted;

R<sup>9</sup> and R<sup>10</sup> each independently is selected from among hydrogen, F, Cl, Br, I, CN, OR<sup>12</sup>, NR<sup>12</sup>R<sup>13</sup>, C<sub>m</sub>(R<sup>12</sup>)<sub>2m</sub>OR<sup>13</sup>, SR<sup>12</sup>, SOR<sup>12</sup>, SO<sub>2</sub>R<sup>12</sup>, NR<sup>12</sup>C(O)R<sup>13</sup>, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl and arylalkyl groups are optionally substituted;

R<sup>11</sup> is selected from among hydrogen, F, Br, Cl, I, CN, OR<sup>14</sup>, NR<sup>14</sup>R<sup>13</sup> and SR<sup>14</sup>;

R<sup>12</sup> and R<sup>13</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, C<sub>2</sub>-C<sub>8</sub> alkenyl, C<sub>2</sub>-C<sub>8</sub> alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted;

R<sup>14</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, aryl, heteroaryl, C(O)R<sup>15</sup>, CO<sub>2</sub>R<sup>15</sup> and C(O)NR<sup>15</sup>R<sup>16</sup>, wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups are optionally substituted;

R<sup>15</sup> and R<sup>16</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> haloalkyl, C<sub>1</sub>-C<sub>8</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

W is O or S;

X is N{R<sup>14</sup>};

Y is selected from among O, S, N{R<sup>12</sup>} and N{OR<sup>12</sup>};

Z is N{R<sup>12</sup>};



n is 0; and

m is 0 or 1;

or a pharmaceutically acceptable salt thereof.

43. (Original) A pharmaceutical composition according to claim 42, wherein the carrier is suitable for enteral, parenteral, suppository, or topical administration.

44. (Previously presented) A pharmaceutical composition according to claim 42, wherein R<sup>1</sup> is selected from among hydrogen, F, Cl, Br, I, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

45. (Previously presented) A pharmaceutical composition according to claim 44, wherein R<sup>1</sup> is selected from among hydrogen, F, Cl, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> haloalkyl and C<sub>1</sub>-C<sub>4</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

46. (Currently amended) A pharmaceutical composition according to claim 42, wherein R<sup>2</sup> is selected from among ~~hydrogen~~, F, Cl, Br, CF<sub>3</sub>, CF<sub>2</sub>Cl, CF<sub>2</sub>H, CFH<sub>2</sub>, substituted C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the haloalkyl and heteroalkyl groups are optionally substituted.

47. (Previously presented) A pharmaceutical composition according to claim 46, wherein R<sup>2</sup> is selected from among F, Cl, Br, CF<sub>3</sub>, CF<sub>2</sub>Cl, CF<sub>2</sub>H, CFH<sub>2</sub>, substituted C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> haloalkyl and C<sub>1</sub>-C<sub>4</sub> heteroalkyl, wherein the haloalkyl and heteroalkyl groups are optionally substituted.

48. (Previously presented) A pharmaceutical composition according to claim 42, wherein R<sup>9</sup> and R<sup>10</sup> each independently is selected from among hydrogen, F, Cl, Br, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

49. (Previously presented) A pharmaceutical composition according to claim 48, wherein R<sup>9</sup> and R<sup>10</sup> each independently is selected from among hydrogen, F and CH<sub>3</sub>.

50. (Previously presented) A pharmaceutical composition according to claim 42, wherein R<sup>11</sup> is selected from among F, Cl, CN, OR<sup>14</sup>, NR<sup>14</sup>R<sup>13</sup> and SR<sup>14</sup>.

51. (Previously presented) A pharmaceutical composition according to claim 50, wherein R<sup>11</sup> is selected from among F, Cl, OR<sup>14</sup>, SR and NR<sup>14</sup>R<sup>13</sup>.

52. (Previously presented) A pharmaceutical composition according to claim 42, wherein Y is O or S.

Claims 53 and 54 (Cancelled)

55. (Previously presented) A pharmaceutical composition according to claim 42, wherein R<sup>12</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl, C<sub>1</sub>-C<sub>6</sub> heteroalkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted.

56. (Cancelled)

57. (Currently amended) A pharmaceutical composition according to claim 42, wherein:

R<sup>3</sup> and R<sup>4</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; or

R<sup>3</sup> and R<sup>5</sup> taken together form a bond; or

R<sup>4</sup> and R<sup>6</sup> taken together form a four to six membered carbocyclic ~~or heterocyclic~~ ring, wherein the carbocyclic ~~or heterocyclic~~ ring is optionally substituted.

58. (Previously presented) A pharmaceutical composition according to claim 42, wherein:

R<sup>5</sup> and R<sup>7</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; or

R<sup>5</sup> and R<sup>7</sup> taken together form a bond.

59. (Currently amended) A pharmaceutical composition according to claim 42, wherein:

R<sup>6</sup> and R<sup>8</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl, C<sub>1</sub>-C<sub>6</sub> heteroalkyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, heteroaryl and aryl groups are optionally substituted; or

R<sup>6</sup> and R<sup>8</sup> taken together form a three to eight membered saturated or unsaturated carbocyclic ~~or heterocyclic~~ ring, wherein the carbocyclic ~~or heterocyclic~~ ring is optionally substituted.

60. (Currently amended) A pharmaceutical composition according to claim 42, wherein:

R<sup>1</sup> is selected from among hydrogen, F, Cl, Br, I, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^2$  is selected from among ~~hydrogen~~, F, Cl, Br,  $CF_3$ ,  $CF_2Cl$ ,  $CF_2H$ ,  $CFH_2$ , substituted  $C_1$ - $C_6$  alkyl;  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the haloalkyl and heteroalkyl groups are optionally substituted; and

$R^3$  and  $R^4$  each independently is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

61. (Currently amended) A pharmaceutical composition according to claim 60, wherein:

$R^5$  through  $R^8$  each independently is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; or

$R^6$  and  $R^8$  taken together form a four to six membered saturated or unsaturated carbocyclic ~~or heterocyclic~~ ring, wherein the carbocyclic ~~or heterocyclic~~ ring is optionally substituted.

62. (Previously presented) A pharmaceutical composition according to claim 61, wherein:

$R^9$  and  $R^{10}$  each independently is selected from among hydrogen, F, Cl, Br,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

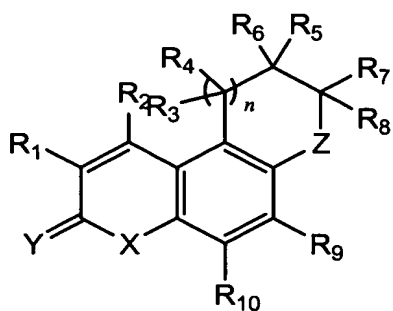
$R^{12}$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl,  $C_2$ - $C_6$  alkenyl,  $C_2$ - $C_6$  alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted; and

$R^{14}$  is selected from among hydrogen,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl,  $C_1$ - $C_6$  heteroalkyl,  $C(O)R^{15}$ ,  $CO_2R^{15}$  and  $C(O)NR^{15}R^{16}$ , wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

63. (Previously presented) A pharmaceutical composition according to claim 62, wherein Y is O or S.

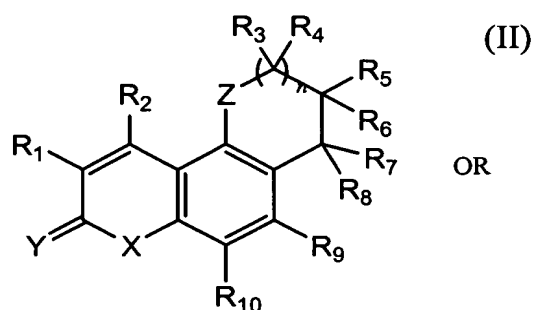
64-97. (Cancelled)

98. (Currently amended) A compound of formula:



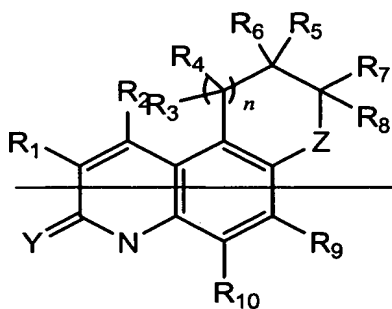
(I)

OR



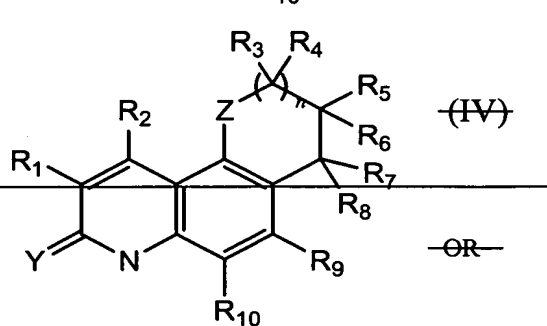
(II)

OR



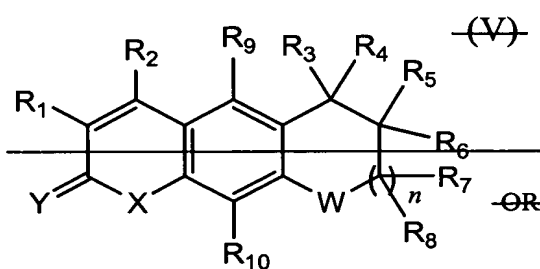
(III)

OR



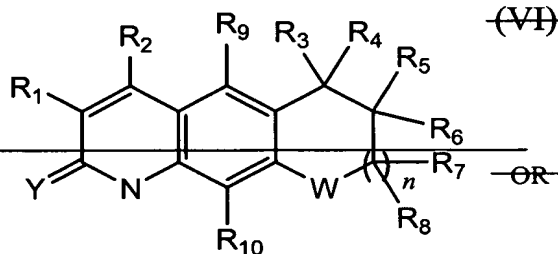
(IV)

OR



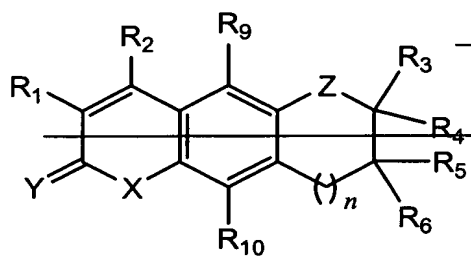
(V)

OR



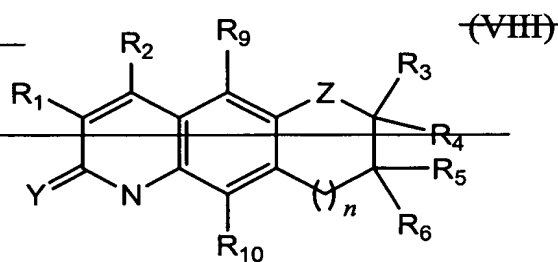
(VI)

OR

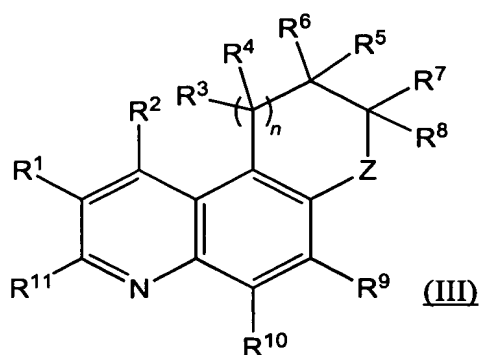


(VII)

OR

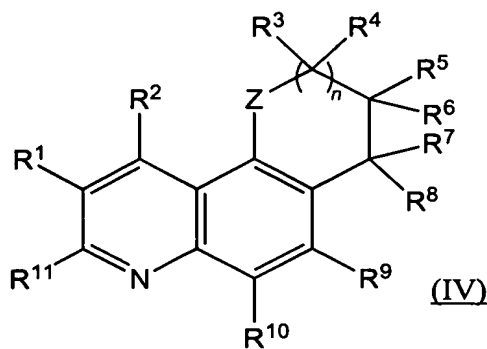


(VIII)



(III)

OR



(IV)

wherein:

$R^1$  is selected from among hydrogen, F, Cl, Br, I,  $\text{NO}_2$ ,  $\text{OR}^{12}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  $\text{NR}^{12}\text{R}^{12}$ ,  $\text{C}_1\text{-C}_8$  alkyl,  $\text{C}_1\text{-C}_8$  haloalkyl and  $\text{C}_1\text{-C}_8$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^2$  is selected from among F, Cl, Br, I,  $\text{CF}_3$ ,  $\text{CHF}_2$ ,  $\text{CH}_2\text{F}$ ,  $\text{CF}_2\text{Cl}$ ,  $\text{CN}$ ,  $\text{CF}_2\text{OR}^{12}$ ,  $\text{CH}_2\text{OR}$ ,  $\text{OR}^{12}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  $\text{NR}^{12}\text{R}^{13}$ , ~~substituted  $\text{C}_1\text{-C}_6$  alkyl selected from among ethyl, *n*-propyl, isopropyl, *n*-butyl, isobutyl, *sec*-butyl, *tert*-butyl, *tert*-amyl, pentyl, hexyl, heptyl, octyl,  $\text{C}_1\text{-C}_8$  haloalkyl, and  $\text{C}_1\text{-C}_8$  heteroalkyl,  $\text{C}_2\text{-C}_8$  alkenyl and  $\text{C}_2\text{-C}_8$  alkynyl~~, wherein the ~~alkyl, haloalkyl, and heteroalkyl, alkenyl and alkynyl~~ groups are optionally substituted;

$R^3$  through  $R^8$  each independently is selected from among hydrogen, F, Cl, Br, I,  $\text{OR}^{12}$ ,  $\text{NR}^{12}\text{R}^{13}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  ~~$\text{C}_1\text{-C}_8$  alkyl,  $\text{C}_1\text{-C}_8$  haloalkyl,  $\text{C}_1\text{-C}_8$  heteroalkyl,  $\text{C}_2\text{-C}_8$  alkynyl,  $\text{C}_2\text{-C}_8$  alkenyl, aryl, heteroaryl and arylalkyl~~, wherein the ~~alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl~~ groups are optionally substituted;

$R^3$  is selected from among hydrogen,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_1\text{-C}_6$  haloalkyl and  $\text{C}_1\text{-C}_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^4$  is selected from among hydrogen,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_1\text{-C}_6$  haloalkyl and  $\text{C}_1\text{-C}_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^5$  is selected from among hydrogen,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_1\text{-C}_6$  haloalkyl and  $\text{C}_1\text{-C}_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^6$  is selected from among hydrogen,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_1\text{-C}_6$  haloalkyl,  $\text{C}_1\text{-C}_6$  heteroalkyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, heteroaryl and aryl groups are optionally substituted;

$R^7$  is selected from among hydrogen,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_1\text{-C}_6$  haloalkyl and  $\text{C}_1\text{-C}_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

$R^8$  is selected from among hydrogen,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_1\text{-C}_6$  haloalkyl,  $\text{C}_1\text{-C}_6$  heteroalkyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, heteroaryl and aryl groups are optionally substituted; or

$R^3$  and  $R^5$  taken together form a bond; or

$R^5$  and  $R^7$  taken together form a bond; or

$R^4$  and  $R^6$  taken together form a three- to eight-membered saturated or unsaturated carbocyclic ~~or heterocyclic~~ ring, wherein the carbocyclic ~~or heterocyclic~~ ring is optionally substituted; or

$R^6$  and  $R^8$  taken together form a three- to eight-membered saturated or unsaturated carbocyclic or heterocyclic ring, wherein the carbocyclic or heterocyclic ring is optionally substituted;

$R^9$  and  $R^{10}$  each independently is selected from among hydrogen, F, Cl, Br, I, CN,  $OR^{12}$ ,  $NR^{12}R^{13}$ ,  $C_m(R^{12})_{2m}OR^{13}$ ,  $SR^{12}$ ,  $SOR^{12}$ ,  $SO_2R^{12}$ ,  $NR^{12}C(O)R^{13}$ ,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl and arylalkyl groups are optionally substituted;

$R^{11}$  is selected from among F, Br, Cl, I, CN,  $OR^{14}$ ,  $NR^{14}R^{13}$ , and  $SR^{14}$ ;

$R^{12}$  and  $R^{13}$  each independently is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl,  $C_2$ - $C_8$  alkenyl,  $C_2$ - $C_8$  alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted;

$R^{14}$  is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl, aryl, heteroaryl,  $C(O)R^{15}$ ,  $CO_2R^{15}$  and  $C(O)NR^{15}R^{16}$ , wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups are optionally substituted;

$R^{15}$  and  $R^{16}$  each independently is selected from among hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_8$  haloalkyl,  $C_1$ - $C_8$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

W is O or S;

X is  $N\{R^{14}\}$ ;

Y is selected from the group of O, S,  $N\{R^{12}\}$  and  $NO\{R^{12}\}$ ;

Z is  $N\{R^{12}\}$ ;

n is 0; and

m is 0 or 1;

or a pharmaceutically acceptable salt thereof.

99. (Cancelled).

100. (Previously presented) A compound according to claim 98, wherein  $R^1$  is selected from among hydrogen, F, Cl, Br, I,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

101. (Previously presented) A compound according to claim 98, wherein  $R^9$  and  $R^{10}$  each independently is selected from among hydrogen, F, Cl, Br,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  haloalkyl and  $C_1$ - $C_6$  heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted.

102. (Previously presented) A compound according to claim 98, wherein R<sup>11</sup> is selected from among F, Cl, CN, OR<sup>14</sup>, NR<sup>14</sup>R<sup>13</sup> and SR<sup>14</sup>.

103. (Previously presented) A compound according to claim 98, wherein Y is O or S.

104. (Previously presented) A compound according to claim 98, wherein R<sup>12</sup> is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl, C<sub>1</sub>-C<sub>6</sub> heteroalkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted.

105. (Currently amended) A compound according to claim 98, wherein:

R<sup>3</sup> and R<sup>4</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; or

R<sup>3</sup> and R<sup>5</sup> taken together form a bond; or

R<sup>4</sup> and R<sup>6</sup> taken together form a four to six membered carbocyclic ~~or heterocyclic~~ ring, wherein the carbocyclic ~~or heterocyclic~~ ring is optionally substituted.

106. (Previously presented) A compound according to claim 42, wherein:

R<sup>5</sup> and R<sup>7</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl and C<sub>1</sub>-C<sub>6</sub> heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; or

R<sup>5</sup> and R<sup>7</sup> taken together form a bond.

107. (Currently amended) A compound according to claim 42, wherein:

R<sup>6</sup> and R<sup>8</sup> each independently is selected from among hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> haloalkyl, C<sub>1</sub>-C<sub>6</sub> heteroalkyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, heteroaryl and aryl groups are optionally substituted; or

R<sup>6</sup> and R<sup>8</sup> taken together form a three to eight membered saturated or unsaturated carbocyclic ~~or heterocyclic~~ ring, wherein the carbocyclic ~~or heterocyclic~~ ring is optionally substituted.

## REMARKS

A check for \$450 for a two-month extension of time accompanies this response. Any fees that may be due in connection with the filing of this paper or with this application may be charged to Deposit Account No. 06-1050. If a Petition for Extension of time is needed, this paper is to be considered such Petition.

The specification is amended herein to correct minor typographical errors. No new matter is added.

Claims 1-17, 23-26, 30-52, 55, 57-63, 98 and 100-107 are pending. Claim 99 is cancelled herein without prejudice or disclaimer. Claims 1, 6, 9, 30, 34-37, 40-42, 46, 57, 59-61, 98, 105 and 107 are amended herein. Claims 1, 42 and 98 are amended herein to correct an inadvertent typographical error in Formulae III and IV. Formulae III and IV are amended to replace the double-bonded Y substituent with a single-bonded R<sup>11</sup> substituent. Basis for the amendment is found throughout the specification (for example, see page 12, lines 1-5 and original claim 1). Claims 1, 42 and 98 also are amended to cancel Formulae V through VIII, which are non-elected subject matter. Applicant reserves the right to file divisional application(s) to the cancelled subject matter. Claims 1, 42 and 98 are further amended to more distinctly claim the subject matter by separating out the definitions for substituents R<sup>3</sup> through R<sup>8</sup>. Basis for the amendment is found throughout the specification (e.g., see pages 16-24). Claims 1, 30, 34, 35, 37, 42, 57, 59, 61, 98 and 105 are amended to delete the embodiments where R<sup>4</sup> and R<sup>6</sup> or R<sup>6</sup> and R<sup>8</sup> taken together form a heterocyclic ring. Claim 6 is amended to correct a minor typographical error. Claims 9 and 36 are amended to more distinctly claim the subject matter to recite that the alkyl group is substituted.

Claims 40 and 41 are amended to delete non-elected subject matter. Applicant reserves the right to file divisional application(s) to the cancelled subject matter. Claims 40 and 41 also are amended to more distinctly claim the subject matter by replacing the recitation "trifluoroethyl" with the recitation "2,2,2-trifluoroethyl." Basis for the amendment is found throughout the specification (for example, see page 54, lines 19-20; page 56, lines 12-13; page 56, lines 20-22; and page 59, lines 23-25). Claims 46 and 60 are amended to more distinctly claim the subject matter by deleting the recitation "hydrogen."

No new matter is added.



**THE REJECTION OF CLAIMS 9-11, 36-39, 46, 47, 60-63 AND 99 UNDER 35 U.S.C. § 112, SECOND PARAGRAPH**

Claims 9-11, 36-39, 46, 47, 60-63 and 99 are rejected as allegedly failing to particularly point out and distinctly claim the subject matter for which protection is being sought.

**Claims 9 and 36**

Claims 9 and 36 and claims dependent thereon are rejected because substituent R<sup>1</sup> recites “unsubstituted alkyl,” which allegedly has no antecedent basis in base claim 1. Claims 9 and 36 are amended to conform the definition of substituent R<sup>1</sup> to the definition of R<sup>1</sup> recited in claim 1. Applicant respectfully submits that the rejection is rendered moot in light of the amendment of claims 9 and 36 herein, which deletes the recitation “unsubstituted alkyl” from the definition of substituent R<sup>1</sup> in claims 9 and 36.

**Claims 46 and 60**

Claims 46 and 60 and claims dependent thereon are rejected because substituent R<sup>2</sup> recites “hydrogen,” which allegedly has no antecedent basis in base claim 42. Claims 46 and 60 are amended to conform the definition of substituent R<sup>2</sup> to the definition for R<sup>2</sup> recited in claim 42. Applicant respectfully submits that the rejection is rendered moot in light of the amendment of claims 46 and 60 herein, which deletes the recitation “hydrogen” from the definition of substituent R<sup>2</sup> in claims 46 and 60.

**Claim 99**

Claim 99 is rejected because there allegedly is no basis for the recitation “carrier” in the base claim 98. Applicant respectfully submits that the rejection is rendered moot in light of the cancellation of claim 99 herein.

**THE REJECTION OF CLAIMS 1-17, 23-26, 30-39, 42-52, 55, 57-63 AND 98-107 UNDER 35 U.S.C. § 112, FIRST PARAGRAPH**

Claims 1-17, 23-26, 30-39, 42-52, 55, 57-63 and 98-107 are rejected as allegedly failing to comply with the written description requirement. The Examiner alleges that the claims include subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor as the time the application was filed has possession of the claimed subject matter. The Examiner provides several bases for rejection, which are discussed in turn below. This rejection is respectfully traversed.

## RELEVANT LAW

The purpose behind the written description requirement is to ensure that the patent applicant had possession of the claimed subject matter at the time of filing of the application *In re Wertheim*, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). The manner in which the specification meets the requirement is not material; it may be met by either an express or an implicit disclosure.

35 U.S.C. ' 112 requires a written description of the invention. This requirement is distinct from and not coterminous with the enablement requirement:

The purpose of the Awritten description@ requirement is broader than to merely explain how to Amake and use@; the applicant must also convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the Awritten description@ inquiry, whatever is now claimed." *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d at 1563-64, 19 USPQ2d at 1117.

The issue with respect to 35 U.S.C. ' 112, first paragraph, adequate written description has been stated as:

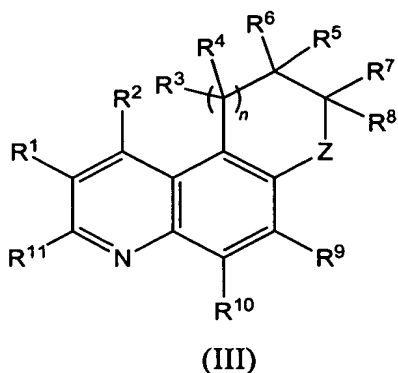
[d]oes the specification convey clearly to those skilled in the art, to whom it is addressed, in any way, the information that appellants invented that specific compound [claimed embodiment] *Vas-Cath, Inc. v. Mahurkar*, at 1115, quoting *In re Ruschig*, 390 F.2d 1990, at 995-996, 154 USPQ 118 at 123 (CCPA 1967).

A specification must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention, *i.e.*, whatever is now claimed. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991).

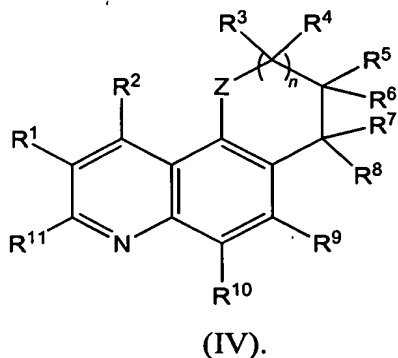
## ANALYSIS

### 1. Formulae III and IV

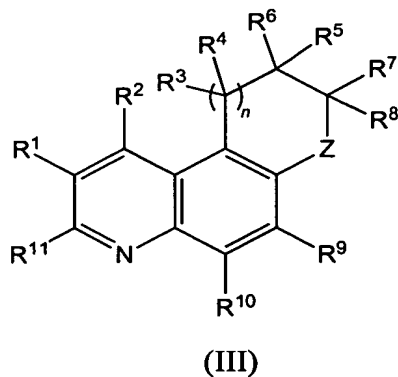
Claims 1 and 42 are rejected because it is alleged that Formulae III and IV are not described in the specification. Claims 1 and 42 are amended herein to replace the Y substituent with R<sup>11</sup> to correct the inadvertent typographical error introduced in Formulae III and IV. Basis for compounds of Formulae III and IV is found throughout the specification. For example, see page 12, lines 1-5, which sets forth Formulae III and IV as:



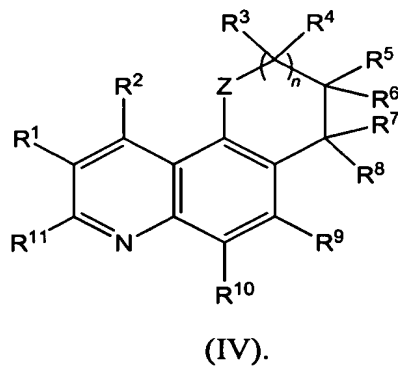
OR



In addition, original claim 1 sets forth Formulae III and IV as:



and



Thus, the specification provides basis for compounds of Formulae III and IV. Applicant respectfully requests reconsideration and withdrawal of the rejection.

## 2. "Substituted Alkyl"

Claims 1 and 42 are rejected because the specification allegedly fails to describe a compound where R<sup>1</sup> and/or R<sup>2</sup> is a "substituted alkyl." The applicant respectfully disagrees. The specification teaches that the alkyl group of substituents R<sup>1</sup> and R<sup>2</sup> may be optionally substituted. For example, see page 5, lines 2-8, which recites:

$R^1$  is selected from among hydrogen, F, Cl, Br, I,  $\text{NO}_2$ ,  $\text{OR}^{12}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  $\text{NR}^{12}\text{R}^{13}$ ,  $\text{C}_1\text{-C}_8$  alkyl,  $\text{C}_1\text{-C}_8$  haloalkyl and  $\text{C}_1\text{-C}_8$  heteroalkyl, wherein **the alkyl, haloalkyl and heteroalkyl groups are optionally substituted**;

$R^2$  is selected from among F, Cl, Br, I,  $\text{CF}_3$ ,  $\text{CHF}_2$ ,  $\text{CH}_2\text{F}$ ,  $\text{CF}_2\text{Cl}$ , CN,  $\text{CF}_2\text{OR}^{12}$ ,  $\text{CH}_2\text{OR}^{12}$ ,  $\text{OR}^{12}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  $\text{NR}^{12}\text{R}^{13}$ ,  $\text{C}_1\text{-C}_8$  alkyl,  $\text{C}_1\text{-C}_8$  haloalkyl,  $\text{C}_1\text{-C}_8$  heteroalkyl,  $\text{C}_2\text{-C}_8$  alkenyl and  $\text{C}_2\text{-C}_8$  alkynyl, wherein **the alkyl, haloalkyl, heteroalkyl, alkenyl and alkynyl groups are optionally substituted**; [emphasis added].

The specification states, on page 10, line 10, that “ ‘optionally substituted’ groups may be substituted or unsubstituted.” Thus, the recitation “optionally substituted” means “substituted or unsubstituted” throughout the specification. Hence, the specification discloses as a genus compounds with substituents, such as alkyl, haloalkyl and heteroalkyl groups, that are substituted or unsubstituted. For example, the definition for  $R^1$  equivalently can be recited:

$R^1$  is selected from among hydrogen, F, Cl, Br, I,  $\text{NO}_2$ ,  $\text{OR}^{12}$ ,  $\text{SR}^{12}$ ,  $\text{SOR}^{12}$ ,  $\text{SO}_2\text{R}^{12}$ ,  $\text{NR}^{12}\text{R}^{13}$ , substituted or unsubstituted  $\text{C}_1\text{-C}_8$  alkyl, substituted or unsubstituted  $\text{C}_1\text{-C}_8$  haloalkyl and substituted or unsubstituted  $\text{C}_1\text{-C}_8$  heteroalkyl;

Therefore, the specification provides basis for the recitation “substituted alkyl” for the descriptions of substituents  $R^1$  and  $R^2$  in claims 1 and 42. Applicant respectfully requests that the rejection be reconsidered and withdrawn.

### 3. Claim 98

Claim 98 is rejected because the specification allegedly fails to describe a compound where  $R^2$  is an alkyl selected from among ethyl, *n*-propyl, isopropyl, *n*-butyl, isobutyl, *sec*-butyl, *tert*-butyl, *tert*-amyl, pentyl, hexyl, heptyl and octyl. Without addressing the propriety of the rejection, in the interest of advancing the application to allowance, it is respectfully submitted that this rejection is rendered moot in light of the amendment of claim 98 herein.

### THE REJECTION OF CLAIMS 1-17, 23-26, 30-39, 42-52, 55, 57-63 AND 98-107 UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

Claims 1-17, 23-26, 30-39, 42-52, 55, 57-63 and 98-107 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly being broader than the enabling disclosure because the specification allegedly does not enable a person skilled in the art to make and use compounds commensurate in scope with the claims. The Examiner alleges that the specification does not provide enablement for (a) compounds where  $R^4$  and  $R^6$  together or  $R^6$  and  $R^8$  together form a heterocyclic ring or (b) compounds where the adjacent  $R^3$ - $R^8$  substituents are all optionally substituted aryl or heteroaryl. This rejection is respectfully traversed.

## RELEVANT LAW

The test of enablement is whether one skilled in the art can make and use what is claimed based upon the disclosure in the application and information known to those of skill in the art without undue experimentation. *United States v. Telectronics, Inc.*, 8 USPQ2d 1217 (Fed. Cir. 1988). A certain amount of experimentation is permissible as long as it is not undue. A considerable amount of experimentation is permissible, particularly if it is routine experimentation. The amount of experimentation that is permissible depends upon a number of factors, which include: the quantity of experimentation necessary, the amount of direction or guidance presented, the presence or absence of working examples, the nature of the invention, the state of the prior art, the relative skill of those in the art, the predictability of the art, and the breadth of the claims. *See, Ex parte Forman*, 230 USPQ 546 (Bd. Pat. App. & Int'f 1986); see also *In re Wands*, 8 USPQ2d 1400 (Fed. Cir. 1988).

A patent application need not teach, and preferably omits, what is well known in the art. *Spectra-Physics, Inc. v. Coherent, Inc.*, 3 USPQ2d 1737 (Fed. Cir. 1987). Indeed, "not everything necessary to practice the invention need be disclosed. In fact, what is well-known is best omitted." *In re Buchner*, 929 F.2d 660, 661, 18 U.S.P.Q.2d 1331, 1332. Showing every combination of substituents is unnecessary. The law is clear that patent documents need not include subject matter that is known in the field of the invention and is in the prior art, for patents are written for persons experienced in the field of the invention. *See Vivid Technologies, Inc. v. American Science and Engineering, Inc.*, 200 F.3d 795, 804, 53 USPQ2d 1289, 1295 (Fed. Cir. 1999).

## ANALYSIS

### A. "Heterocyclic Ring"

Claims 1-17, 23-26, 30-39, 42-52, 55, 57-63 and 98-107 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly being broader than the enabling disclosure because the specification allegedly does not provide enablement for compounds where R<sup>4</sup> and R<sup>6</sup> together or R<sup>6</sup> and R<sup>8</sup> together form a heterocyclic ring. Without conceding the propriety of the rejection, in the interest of advancing this application to allowance, it is respectfully submitted that this rejection is rendered moot by the amendment of claims 1, 30, 34, 35, 37, 42, 57, 59, 61, 98 and 105 to delete the embodiments where R<sup>4</sup> and R<sup>6</sup> or R<sup>6</sup> and R<sup>8</sup> taken together form a heterocyclic ring.

**B. "Adjacent R<sup>3</sup> through R<sup>8</sup> Substituents"**

Claims 1-17, 23-26, 30-39, 42-52, 55, 57-63 and 98-107 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly being broader than the enabling disclosure because the specification allegedly does not provide enablement for compounds where the adjacent R<sup>3</sup>-R<sup>8</sup> substituents are all optionally substituted aryl or heteroaryl. Applicant respectfully submits that as amended, the adjacent R<sup>3</sup>-R<sup>8</sup> substituents of claims 1, 42 and 98 cannot all be optionally substituted aryl or heteroaryl. In pending claims 1, 42 and 98, none of R<sup>3</sup>, R<sup>5</sup> nor R<sup>7</sup> includes as an element in its description an optionally substituted aryl or heteroaryl. Thus, the rejection is rendered moot by the amendment of claims 1, 42 and 98 herein.

**Objection to Claims 40 and 41**

The Examiner objects to claims 40 and 41 as being allowable but depending from a rejected base claim. Applicant respectfully submits that claim 1 (the base claim) is in condition for allowance. Thus, applicants respectfully request that the objection to claims 40 and 41 be reconsidered and withdrawn.

\* \* \*

In view of the above, reconsideration and allowance is respectfully requested.

Respectfully submitted,

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Stephanie Seidman  
Reg. No. 33,779


Attorney Docket No. 18202-017001 / 1081  
**Address all correspondence to:**  
Stephanie Seidman  
Fish & Richardson P.C.  
12390 El Camino Real  
San Diego, California 92130  
Telephone: (858) 678-5070  
Facsimile: (202) 626-7796  
email: seidman@fr.com

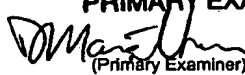
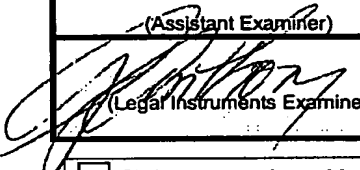
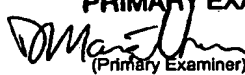
Applicant : Lin Zhi *et al.*  
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Filed : February 22, 2002

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**Request for Correction to Issued Certificate of Correction**



**INDEX OF CLAIMS**  
**DATED 27 OCTOBER 2005**

<b>Issue Classification</b> 	Application/Control No.	Applicant(s)/Patent under Reexamination	
	10/080,926	ZHI ET AL.	
	Examiner	Art Unit	
	D. Margaret Seaman	1625	

ISSUE CLASSIFICATION												
ORIGINAL				CROSS REFERENCE(S)								
CLASS		SUBCLASS		CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)							
546		80		546	84	89	62	70				
INTERNATIONAL CLASSIFICATION				514	291	292	285					
C	0	7	D	455 / 04								
C	0	7	D	221 / 18								
C	0	7	D	471 / 00								
A	6	1	K	31 / 44								
				1								
				<b>D. MARGARET SEAMAN</b> <b>PRIMARY EXAMINER</b> 				<b>Total Claims Allowed: 61</b>				
 (Assistant Examiner) (Date) 10/27/05				 (Primary Examiner) (Date) 10/27/05				O.G. Print Claim(s) 1		O.G. Print Fig. none		

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